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ABSTRACT

This collection of abstracts from current research and theoretical studies explores various aspects of the relationship between non-opiate drug use and personality. The literature covers a period from 1968 through 1975 and focuses on tests that were conducted on adolescents and college students from the United States, Canada and Sydney, Australia. Each abstract conveys what was done, why it was done, what methodology was employed, what results were found and what conclusions were derived from the results. As many as 59 different types of testing instruments were used to determine if a subject's personality trait (e.g., sensation-seeking, emotional instability, insufficient ego strengths, etc.) would lead to the use of drugs such as alcohol, LSD, marihuana and amphetamines. A supplemental bibliography of additional reading is also included in the volume along with several indexes designed to meet the needs and interests of further researchers. (Author/JMF)

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DRUGS AND PERSONALITY

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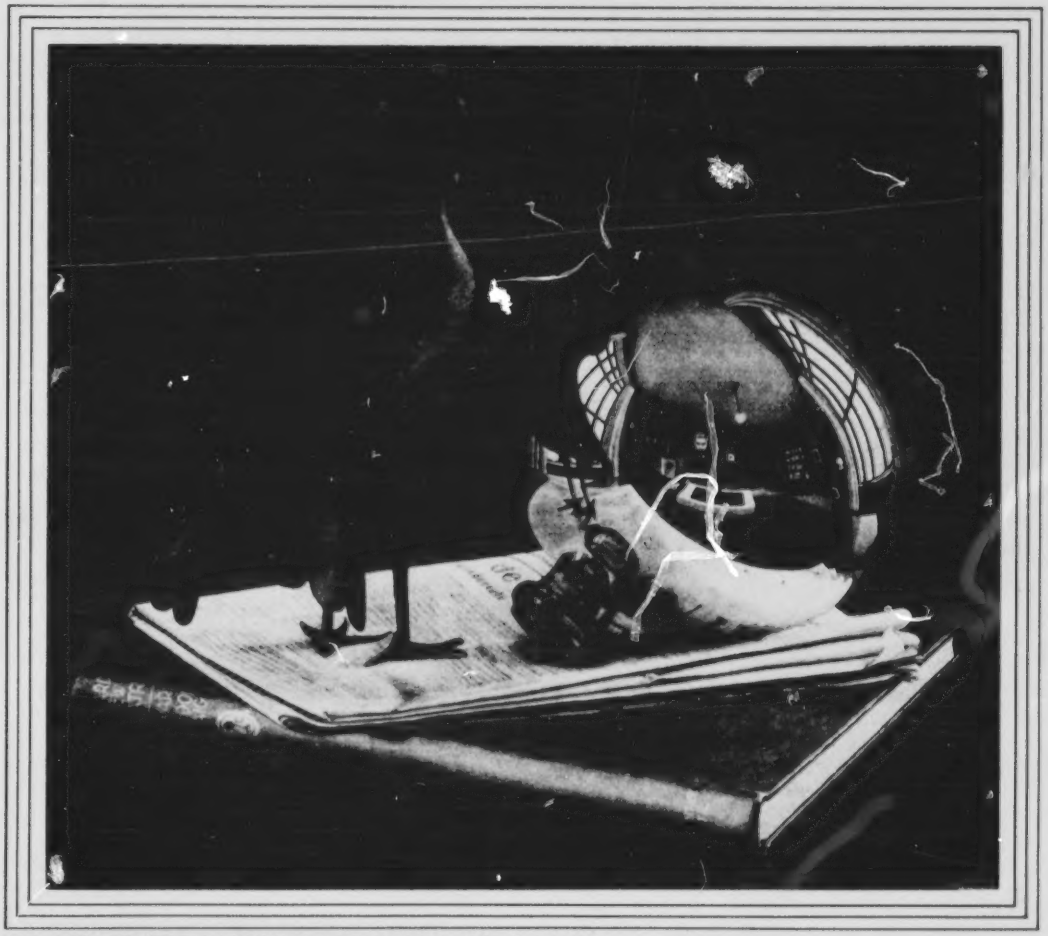

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DRUGS AND PERSONALITY

Personality Correlates and Predictors of Non-Opiate Drug Use

Edited by

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National Institute on Drug Abuse

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Foreword

The issues of psychosocial drug use and abuse have generated many volumes analyzing the "problem" and suggesting "solutions." Research has been conducted in many disciplines and from many different points of view. The need to bring together and make accessible the results of these research investigations is becoming increasingly important. The Research Issues Series is intended to aid investigators by collecting, summarizing, and disseminating this large and disparate body of literature. The focus of this series is on critical problems in the field. The topic of each volume is chosen because it represents a challenging issue of current interest to the research community. As additional issues are identified, relevant research will be published as part of the series.

Many of the volumes in the series are reference summaries of major empirical research and theoretical studies of the last fifteen years. These summaries are compiled to provide the reader with the purpose, methodology, findings, and conclusions of the studies in given topic areas. Other volumes are original resource handbooks designed to assist drug researchers. These resource works vary considerably in their topics and contents, but each addresses virtually unexplored areas which have received little attention from the research world.

The Research Issues Series is a group project of staff members of the National Institute on Drug Abuse, Division of Research, Psychosocial Branch. Special gratitude is due Dr. Louise Richards for her continued guidance and support.

Dan J. Lettieri, Ph.D.
Project Officer
National Institute on Drug Abuse

Preface

This volume presents abstracts of current research and theoretical studies that explore various aspects of the relationship between non-opiate drug use and personality. Particularly, the volume focuses on personality predictors and correlates of adolescent drug use. Each abstract is intended to be a faithful representation of the original study, conveying what was done, why it was done, what methodology was employed, what results were found, and what conclusions were derived from the results. Each author's word usage and spelling were followed as closely as possible.

The 55 studies abstracted in this volume are listed alphabetically following the table of contents. A supplementary bibliography of additional reading is included at the end of the summaries. The volume also has several indexes, carefully designed to meet the needs and interests of drug researchers.

An extensive and comprehensive literature search was carried out to identify materials for inclusion in this volume. Major clearinghouses, data bases, library collections, and special bibliographies were searched. The editors also corresponded with professional organizations, institutions, and research specialists in searching for relevant materials. Current issues of newsletters and journals were scanned throughout the project. The list of bibliographic sources searched includes:

Addiction Research Foundation, Bibliographies
Dissertation Abstracts
Index Medicus
National Clearinghouse for Drug Abuse Information
Psychological Abstracts
Public Affairs Information Service
Research in Education
Social Sciences Citation Index
Sociological Abstracts
SPEED: The Current Index to Drug Abuse Literature

After a first review of citations and annotations, to weed out obviously irrelevant materials, the body of collected literature was reviewed to ensure that materials met the selection criteria, and that studies representative of the universe were included. Each summary was also reviewed by a drug specialist.

A bibliographic project such as this necessarily involved a great number of people, all of whom contributed their own talent. The assistance given by specialists in the field should especially be acknowledged. Dr. Peter Bentler provided critical assistance in identifying the literature; Lewis Banks reviewed each abstract. The project staff included: Dr. Claire Eves, Gayle Kleiman, and Mary A. Macari.

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Personality Correlates and Predictors of Non-Opiate Drug Use

Braucht, G. Nicholas; Brakarsh, Daniel; Follingstad, Diane; and Berry, K.L. Deviant drug use in adolescence: A review of psychosocial correlates. Psychological Bulletin, 79(2):92-106, 1973.

PURPOSE

A critical review of the literature concerning the sociocultural and personality correlates of deviant adolescent drug use was made in an attempt to assess the level of psychosocial description and explanation which is presently available.

SUMMARY

Existing research on sociocultural and personality correlates of adolescent use of alcohol, narcotics, and psychedelic drugs are summarized.

As it relates to narcotic use, much research has focused on fragmentation that exists in the family backgrounds of addicts. Many researchers agree that parents of addicts often are extreme personality types, but they disagree as to the nature of the deficiency. One, or both, of the parents may be either protective, overdominating, underdominating, or rejective.

The adolescent narcotic user is frequently a member of an ethnic minority and often comes from an impoverished urban environment. There is a generally high availability of narcotics in such urban areas. Frequently, peer group enticement is related to deviance. Addicts have been found to be immature, insecure, irresponsible, and egocentric. There is some agreement that the addict suffers from a personality disorder, but there is hardly any agreement as to the specific dynamics of this disorder. The drug addict population is loosely defined, and includes more than one personality type.

Classified under the label psychedelic are three distinct drugs--marihuana, LSD, and methamphetamine. Research in the area of sociocultural correlates of adolescent psychedelic use has centered on six major variables: sex, age, socioeconomic status, familial environment, peer group influence, and religious values. The single finding about which there is general agreement is that psychedelic drug users come mainly from the middle and upper classes. All other findings are ambiguous or contradictory. There has been very little agreement as to personality correlates of psychedelic drug use. Conclusive findings were difficult to obtain because of the illegality of the drugs, possible inaccuracy of information obtained, and the hostility of some of those interviewed.

Regarding alcohol use, there appears to be substantial agreement among researchers that adolescent problem drinkers are individuals lacking in personal controls, as evidenced by relatively high aggressiveness and impulsiveness. At the same time, there is some evidence which indicates that adolescent problem drinkers have some basic neurotic tendencies and demonstrate the following traits: (1) relatively low self-esteem, (2) high anxiety, (3) depression, (4) a general lack of success in the attainment of life goals.

This review of the literature indicates a number of methodological and theoretical shortcomings in the body of research previously conducted. Widespread use of unrepresentative, uncontrolled subject samples and small sample observational data make it difficult to delineate the prominent personality correlates of adolescent drug use. Very little longitudinal research has been reported in this area.

It is suggested that research should be embedded in a theoretical framework which is focused on a psychosocial explanation of adolescent drug use, and which embraces both sociocultural and personality variables. It is also suggested that some coordination among alcohol, narcotic, and psychedelic researchers be developed since the same variables may be involved in each kind of use.

Brehm, Mary L.; and Back, Kurt W. Self image and attitudes towards drugs. Journal of Personality, 36:299-314, 1968.

DRUG	Multi-Drug
SAMPLE SIZE	333
SAMPLE TYPE	Students
AGE	Adults (18-64)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	3

PURPOSE

It was hypothesized that a relationship exists between an individual's desire for personal change in the light of a devalued self-image, and a willingness to adopt a somatic means of change through the use of drugs of all types, ranging from aspirin to hallucinogens. Such a hypothesis assumes an individual's assumption of a mind-body relation and acceptance of it as beneficial. Investigators examined (1) the extent to which there was consistency in items designed to tap attitudes expressive of concern for one's present conditions and a willingness to accept change; (2) whether there was some consistent pattern of acceptance of various external agents; (3) the relationship between these attitudes and willingness to use different agents; and (4) the relationship between these variables and other measures of self-description.

METHODOLOGY

Subjects consisted of 333 male and female undergraduate students enrolled in introductory psychology classes. The questionnaire included 34 items concerned with attitudes towards taking medications, typical response to illness, and concern with personal controls. Subjects responded by checking one of six alternatives ranging from "Strongly Agree" to "Strongly Disagree." In a second section dealing with drug usage, subjects were asked to indicate, on a scale of six alternatives ranging from "Definitely" to "Not at all", their willingness to take ten types of agents: aspirin, sedatives, stimulants (coffee, tea), tobacco, alcohol, analgesics, energizers, tranquilizers, hallucinogens, and opiates. The final section evaluated three concepts of self--External, Ideal, and Hidden--through a series of seven descriptive continua such as "calm" to "nervous," and "passive" to "aggressive." Sections 1 and 2 were factor-analyzed using a principal components solution and a varimax rotation. The three Self scales in the third section were used to construct discrepancy scores, which in turn were correlated with the other two sections.

RESULTS

Five factors emerged from the 34 items in Section 1: Insecurity, Fear of Loss of Control, Sick Role, Denial of Effects, and Curiosity. Insecurity indicated a wish to be stimulated in conjunction with anxiety elements, while Curiosity indicated urge for stimulation without anxiety. For males, Insecurity related positively to Sick Role and Curiosity, but negatively to Denial of Effects. However, Fear of Loss of Control was associated with high Sick Role scores, suggesting a willingness to seek external help under stress and to experiment, believing in the effectiveness of drugs to produce change, with some anxiety about control loss in experiments with the self. Female subjects indicated association between feelings of inadequacy and willingness to change through experimentation. Females showed greater willingness to use aspirin, while males indicated greater acceptance of hallucinogens and opiates.

For both sexes, the Insecurity factor related to the use of all agents, but Curiosity and the absence of Fear of Loss of Control related only to the use of energizers, hallucinogens and opiates. Males and females were similar in displaying a greater degree of disparity between the Ideal and Hidden Selves than between these and the External Self. This discrepancy was associated with a willingness to use energizers, hallucinogens and opiates, as well as with Insecurity, and Curiosity.

CONCLUSIONS

Two aspects of self-perception lead to a desire for self-modification through the use of physical agents: (1) general dissatisfaction with one's self as expressed in Curiosity and Insecurity and discrepancy between External, Ideal, and Hidden self, and (2) absence of defenses or restraints, be they Fear of Loss of Control in males primarily, or Denial of Effects in females predominantly. Combinations of these motivations and restraints predict inclination for drug use. Where both these factors work inconsistently, situational and social influences may become more effective.

Brill, Norman Q.; Crumpton, Evelyn; and Grayson, Harry M. Personality factors in marihuana use. Archives of General Psychiatry, 42:163-165, February 1971.

DRUG	Cannabis
SAMPLE SIZE	79
SAMPLE TYPE	Students
AGE	Adults (Primarily 18 and 19 years old)
SEX	37 Male; 42 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Los Angeles, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	7

PURPOSE

Previous researchers have suggested that marihuana use correlates with amotivational syndrome, possibly causing passivity, inward-turning, and lack of motivation. Investigators at the UCLA School of Medicine, Center for the Health Sciences, investigated the relationship of some personality factors to marihuana use.

METHODOLOGY

Thirty-seven male and 42 female undergraduates, primarily 18- and 19-year-old freshmen and sophomores, enrolled in a basic psychology class at UCLA, participated by responding to a drug use questionnaire and a psychological inventory, in lieu of submitting a more time-consuming class assignment. The psychological inventory consisted of four scales derived from the Minnesota Multiphasic Personality Inventory measuring psychopathic deviation, depression, anxiety level, and ego strength, as well as risk taking propensity and stimulus seeking scales, and nine items constructed for the study. The test instruments measured anxiety, depression, rebelliousness, goal orientation, identification with parents, acceptance of the establishment, anger, self-esteem, emotional adjustment, meaningfulness of life, and demographic data. Fourteen subjects used marihuana daily, 19 once or twice weekly, 18 up to twice monthly, and 28 less than once per month. The two control groups consisted of 20 subjects who reported having never used marihuana, and 20 who tried it without continuing use. The four user groups were compared with both control groups; also, nonusers, and the 28 infrequent users were pooled and compared with the other user groups. Statistical tests used included single classification analysis of variance for continuous variables, and X^2 tests for categorical variables.

RESULTS

Significant differences appeared among the various frequencies of marihuana use and the scales measuring stimulus seeking and psychopathic deviation, by single classification analysis; similar differences appeared in two of the nine constructed items, by χ^2 test. Use of marihuana was related directly to higher scores on the above standardized tests, and by responses of "true" to the following items: "A person should not be punished for breaking a law that he thinks is unreasonable," and "As long as I can remember, I have had more emotional problems than other people." Frequency of use was insignificantly related to higher anxiety and depression levels, greater propensity for risk taking, and lower ego strength. Sex was the only demographic variable related to marihuana use, with more males reporting daily ingestion, and more females having never tried the drug. Correlation occurred between use of marihuana and other drugs, with 100% of the daily users having tried amphetamines, hallucinogens, cocaine, tranquilizers, opium, or heroin, in contrast to 84% of the weekly users, 18% of the monthly users, 20% of those who tried marihuana but quit, and none of the subjects who had never tried marihuana. Use of alcohol was not related to use of marihuana. Order of drug use was not investigated, although over half the users began before college, and 65% continue at a relatively stable rate; 8% reported gradual increase, and 28% reported gradual decrease in frequency.

CONCLUSIONS

Findings do not support hypotheses about impaired parental identification, goal-orientation, role of religion, and liking for risks, but suggest that students who are frequent marihuana users tend to be more rebellious and stimulus seeking. Use of marihuana appears more of a correlate than a cause or manifestation of specific personality traits. No simple linear relationship exists between frequency of use and personality variables; rather, the frequent users appear to be more like the nonuser and experimenter. A longitudinal study currently in progress is exploring the question as to whether frequent marihuana users proceed to other drugs, or whether some individuals are personality types inclined to use marihuana and other drugs.

Burke, Edward L., and Eichberg, Robert H. Personality characteristics of adolescent users of dangerous drugs as indicated by the Minnesota Multiphasic Personality Inventory. The Journal of Nervous and Mental Disease, 154(4):291-298, 1972.

DRUG	Multi-drug
SAMPLE SIZE	242
SAMPLE TYPE	Treatment (outpatient)
AGE	Adolescents; Adults (Predominantly between 17 and 19 years)
SEX	107 Male; 135 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	12

PURPOSE

Recent years have produced a new population of teenage multi-drug users, with the accent on marihuana, hallucinogens, amphetamines and barbiturates. Investigators at Langley Porter Neuropsychiatric Institute, San Francisco, examined personality characteristics of this population, using the Minnesota Multiphasic Personality Inventory.

METHODOLOGY

Three adolescent samples were examined and compared, one consisting of 53 males and 34 females, patients at Langley Porter Neuropsychiatric Institute's Youth Drug Study Unit (YDSU); a second included 34 male and 36 female participants in Developing Adolescents Without Narcotics (DAWN), a program of outpatient counselling; both these samples consisted of young people whose drug use was not primarily narcotic. A third sample was made up of 48 male and 37 female patients admitted to Langley Porter Neuropsychiatric Institute's general ward for reasons other than drug use. Most subjects were between 17 and 19 years of age. All completed the MMPI. All profiles were graphed, and compared with a profile for teenage male narcotic addicts, derived from the literature.

RESULTS

The most striking differences between the two samples using dangerous drugs (YDSU and DAWN) on the one hand and the narcotic addict sample (NARC) on the other were the much higher scores on Sc, Pd, and Mf among the former two. Between YDSU and DAWN, YDSU's scores were higher, displaying a configuration virtually identical with the LPNI sample, particularly for females. All three samples were basically Sc-Pd profiles, and differ sharply from the classic Pd-Ma juvenile delinquency profile. In the two drug-using samples, male Sc scores were higher than

those of the LPNI patients, but this latter group scored higher in Paranoia. Among both drug taking samples, males indicated lower self-esteem than did females, but all three female samples were similar, and indicated clear identification with the established gender role.

CONCLUSIONS

Findings indicate that the males of both hospitalized samples are experiencing similar adolescent crises and responding with similar types of pathology, intensified by drug use and/or reported with greater openness among the YDSU group. The self-esteem scores suggest that seeking help is more of a blow to the male's sense of worth than to the female's, with DAWN outpatients retaining more self-esteem by living at home and continuing school and other normal activities. Studies of drug users who are not enrolled in treatment suggest that within the vast population of persons using drugs, some are able to do so with relatively little resultant disorganization or dysfunction. The DAWN and YDSU samples appear to represent the more disturbed end of a continuum of personality characteristics associated with alienation from society, and ranging from severe psychopathology to relative psychological normalcy. These drug users are distinct from narcotics addicts, a finding which has implications for intervention and treatment based on personality dynamics, i.e., treating the underlying emotional problems rather than drug use as such.

Carlin, Albert S., and Post, Robin Dee. Drug use and achievement. The International Journal of the Addictions, 9(3):401-410, 1974.

DRUG	Cannabis; Hallucinogens
SAMPLE SIZE	266
SAMPLE TYPE	Volunteer; Students; Other
AGE	Adults (Average age 24.5 years)
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Seattle, Washington
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	1970-1972
NO. OF REFERENCES	8

PURPOSE

Though the marked increase in use of marihuana over the past few years has been accompanied by an increase in knowledge about the drug and a decrease in myths surrounding its effects, a new fear stems from the observation of what has come to be called "amotivational syndrome," or the relationship between lowered achievement and nonmedical use of drugs. Thus far, data gathered on this syndrome are inconsistent and fail to take into account the use of other psychedelic drugs as a potential contributing factor; accordingly, by means of a survey tapping both marihuana and psychedelic drug use, data relevant to the issue of amotivational syndrome were gathered as part of a screening procedure for an ongoing marihuana project.

METHODOLOGY

Information was obtained by interview over a two year period from 1970 to 1972; subjects whose drug experience spanned a continuum from confirmed nonuse to high frequency drug use were drawn from university as well as nonstudent populations. Initial contact was made through advertisements in the university newspaper. Average age of subjects was 24.5 years, ranging from 20 to 41 years. The majority of subjects who had used marihuana also reported experience with other psychedelic drugs including mescaline, LSD, peyote and psilocybin. For these subjects it was not possible to partial out the effects of psychedelic use and marihuana use as they related to motivation; therefore, implicit in the frequency of marihuana use is a relatively high degree of psychedelic use also.

Subjects were asked about their goals, educational experiences, and current occupation. Responses were assigned to a variety of categories relevant to work and school achievement. In addition, subjects were asked to state their goals or ambitions; their responses were subjectively judged as Vague or Absent, Achievement Goals, or Growth Oriented Goals. For statistical analysis,

subjects were categorized according to frequency of marihuana use and extent of experience with other hallucinogenic drugs. With respect to marihuana, five categories were provided, constituting a continuum of current drug involvement ranging from nonuser to daily use. None of the nonusers had had experience with other psychedelic drugs.

RESULTS

Both marihuana use and hallucinogenic experience were inversely related to employment, successful completion of school, and present enrollment in school. Years of education completed varied inversely with the amount of marihuana used and inversely with previous psychedelic experiences. Subjects who had no previous exposure to marihuana offered more achievement goals than subjects who had used marihuana and tended to offer fewer vague or absent goals and fewer growth goals, although these latter trends fall short of statistical significance.

CONCLUSIONS

Data support the hypothesis that a correlation exists between drug use and the decreased levels of achievement associated with "amotivational syndrome," though nothing in these data can be taken as an indication of a causal direction of the relationship. It is not possible to infer from them that drug use precipitates a decline in achievement behavior or that failure to achieve in society leads to drug use.

A commonly held hypothesis to account for this decline in achievement among drug users is that young people who are using drugs have opted out of the cultural norms and expectations related to achievement. This viewpoint invokes the "amiable hippie," one who values interpersonal, esthetic, and growth experiences more highly than achievement. The data partially support this conception of the drug culture. However, the hypothesis relating lack of achievement to a subcultural change in values is questionable because of the unclear relationship between goals and achievement: within the various subject groups, the relationship between the type of goals offered by subjects and their actual achievements did not appear to be impressive. Goal setting varied as a function of the decision to use drugs or not, rather than amount of drugs used.

A number of other hypotheses can be formulated to account for an "amotivational syndrome," and--in all likelihood--any one of these is valid for some individuals. Clinical impressions based on the interviews lend support to many hypotheses--thus, for some individuals, high levels of drug use may lead to a mildly toxic state that interferes with functioning; for others, drug use may provide a defense against recognizing life's psychological difficulties, or a way to deal with the boredom engendered by massive amounts of free time. Then too, there are those who engage in heavy drug use and continue to achieve. Thus, there appears to be no singular relationship between drug use and achievement.

The subjects were self-selected volunteers, consequently the selection procedure must be kept in mind as a possible source of bias in the data.

Carman, Roderick S. Values, expectations, and drug use among high school students in a rural community. The International Journal of the Addictions, 9(1):57-80, 1974.

DRUG	Multi-Drug
SAMPLE SIZE	327
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Unspecified; Rural Community
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	9

PURPOSE

Earlier studies have indicated a relationship between personal values, failure to attain highly valued goals, and drug use. When, through a series of failure experiences, a person learns that such goals are inaccessible and that his own behavior is not effective in achieving them, effort declines, while frustration builds. Heavy and frequent use of drugs may be a means of reducing this internal tension. Investigators at the University of Wyoming, working within Rotter's Social Learning Theory, tested the relationship between goal frustration and problem-oriented drug use, as distinct from social, convivial use among rural high school youth. It was specifically hypothesized that students manifesting low freedom of movement, characterized by low expectations for achieving valued goals, would be more likely to report: (1) heavier drug use, (2) more frequent periods of intoxication, and (3) greater social complications from drug use.

METHODOLOGY

Subjects studied were 327 students in grades 9 through 12 attending a public school serving approximately 739 students in a rural community of 12,000. Students listed 10 goals, which they scaled numerically from 0 to 100 in terms of estimated value and estimated expectation of its occurrence. The numerical score of difference between the two scales for each item provided a measure of disjunction. Disjunction scores were summed and averaged to provide an index of freedom of movement, a high disjunctive score indicating a low freedom of movement. Because some students listed fewer than 10 goals, the average number of goals was 8.7. Students then completed a drug use questionnaire on quantity and frequency of ingestion of marihuana, amphetamines, hallocinogens, and barbiturates; frequency of intoxication in the past year; and frequency of trouble with family, friends, and authorities as a result. Numerical values for these events were summed to a single drug use score, and product-moment correlations calculated between drug use and freedom of movement scores. Two-tail tests were applied.

RESULTS

Goals having to do with needs for recognition and achievement were most frequently mentioned (by 34%), and were given the highest values. Other goals included peer affection and social relationships (15%), finding happiness (14%), environmental and ecological improvement (10%), material possessions (9%), and independence (4%). With the exception of recognition-achievement goals, high correlations (r's between .83 and .87) occurred between stated values and expectations. High disjunction and low freedom of movement scores occurred in that area, and appeared related to drug use. Although marihuana was the most frequently used drug, the strongest relationships with low freedom of movement were found in the case of hallucinogens and barbiturates, with r's of .35 and .41 respectively. Amphetamine use was not significantly related to freedom of movement, nor were there significant differences in freedom of movement scores between users and nonusers.

CONCLUSIONS

Evidence indicates a relationship between low freedom of movement in the area of recognition-achievement, and a form of drug use which might be considered problem-oriented. For assuaging frustration from failure to achieve these goals, barbiturates and hallucinogens appear the popular choice among the student sample. Adolescents who tend to value and seek greater independence are probably more inclined to experiment with drugs; however, striving for independence in the presence of significant failures in achievement and recognition may precipitate a shift towards the problem-oriented form of drug use, rather than the convivial form. This should be borne in mind by counselors and those who work with youth.

Cox, Carole, and Smart, Reginald G. Social and psychological aspects of speed use. A study of types of speed users in Toronto. The International Journal of the Addictions, 7:201-207, 1972.

DRUG	Multi-Drug; Stimulants
SAMPLE SIZE	75
SAMPLE TYPE	Treatment (outpatient)
AGE	Adolescents; Adults (Average age: 18)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Toronto, Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI
DATE(S) CONDUCTED	1970
NO. OF REFERENCES	18

PURPOSE

Most studies of speed users were undertaken in San Francisco's Haight-Ashbury district, and offer little insight into patterns of speed use in other localities. Researchers investigated youthful speed users in Toronto to determine these patterns, including occurrence of other drugs, personal or psychopathological correlates, and motivation.

METHODOLOGY

A sample of 75 male and female speed users, ranging in age from 15 to 27, was obtained through contact with various youth organizations in Toronto. Subjects were assured of anonymity, paid $5.00 for participation, and completed a drug use and demographic questionniare, as well as the Minnesota Multiphasic Personality Inventory. The MMPI was scored on the eight clinical scales and the Barren Ego-Strength Scale, and raw scores converted to T scores as profiles were made for each subject. These were then classified according to Meehl's criteria of differential diagnosis.

RESULTS

The sample contained 15 casual users, 27 moderate users including "week-enders," 30 heavy users taking speed at least four times a week, and three male snorters, very heavy users who inhaled the drug but never injected it. The majority came from middle class homes, in which at least one parent, usually the mother, used tranquilizers or barbiturates. Among the heavy users, 83% injected themselves, while among casual users, 87% relied upon another person to inject the drug. Among the heavy and the moderate users, a girl's allowing several boys to inject her was referred to as "whoring." Most of the users in each group cited relaxation, increased sociability, and increased alertness and ability to think as beneficial effects of speed. Reports as to its

effects upon the sexual drive were too diverse to permit conclusions. Only three persons, all casual users, reported that they had never had unfavorable effects from speed. The others in the casual group reported effects such as dry mouth, depression, dizziness, bad vision, fatigue, and a tendency to become violent. Moderate and heavy users reported mental confusion, infections, hair loss, and paranoia, particularly about the police. Of all users, 66.7% reported various hallucinations or delusions of which paranoia, flashing lights, and changing colors were most common. One-third of the casual users had received some sort of psychiatric treatment either prior to or due to their use of speed, and 57% of the heavy users had seen psychiatrists before beginning use. Among casual users, only 40% called speed their preferred drug, and all stated they could stop its use if they wanted to. Fifty-two percent of the moderate users preferred speed and 56% felt certain they could stop using it; however, 60% of the heavy users called speed their favorite drug, and only 40% felt it would not be difficult to stop. About 40% of the casual and moderate users, and 70% of the heavy users took oral stimulants before injecting speed. All but one member of the sample were regular users of marihuana, hashish, and LSD, which they had taken prior to speed. Only 20% of the casual users, 44% of the moderate users, but 66% of the heavy users had tried heroin, generally after using speed. All groups used alcohol only rarely. Most users claimed that speed use did not interfere with normal functioning, and even enhanced it; furthermore, because of its availability and the fact that it is frequently shared, speed use did not lead to criminal activities. For the casual, moderate, and heavy users, speed is a drug used in a social setting. However, for the group of three snorters, the social importance of the drug was minimal, and injestion of the drug was often to stay awake or dry out from LSD.

The results of the MMPI indicated that casual users have the lowest scores, abnormal on only three scales. Moderate and heavy users were similar, with moderate users above the normal range on all clinical scales, and heavy users above normal on all except two. Snorters had the highest scores of all groups. Each group had its peak score on the Schizophrenia scale, suggesting borderline psychosis, a pattern most likely to be found among neurological patients, psychiatric patients, and prison inmates. Only 52% of the profiles were classifiable according to Meehl's categories. Of these, 49% were deemed psychotic and 3% were diagnosed as having a conduct disorder.

CONCLUSIONS

The speed users in the study are similar to users of other drugs in that they tend to come from homes in which drugs have been used by one or both parents. The social use of speed resembles that of alcohol by "establishment" persons: to relax, release tensions, and increase sociability. Speed offers certain "dropped-out" young people a means of relating to each other. The dependence of users on each other for obtaining, injecting, and sharing the experience of the drug makes speed a basis upon which relationships can be built. Heavy use of speed may be both an attempt to solve emotional problems and a beginning symptom. The MMPI results indicate extensive psychopathology among speed users, of whom casual users appear least disturbed. However, all groups of users indicated psychological dependence on the drug. These findings imply that therapy with speed users has a better chance of succeeding if the individual can be temporarily removed from his subculture and learn how to function effectively without the speed community.

Crain, William C.; Ertel, David; and Gorman, Bernard S. Personality correlates of drug preference among college undergraduates. The International Journal of the Addictions, 10(5):849-856, 1975.

DRUG	Cannabis; Depressants; Stimulants
SAMPLE SIZE	90
SAMPLE TYPE	Students
AGE	17 to 22 years
SEX	Male
ETHNICITY	White
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Omnibus Personality Inventory
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	12

PURPOSE

Investigators at the City College of the City University of New York tested undergraduates to determine personality traits correlating with preference for a specific drug and its effects.

METHODOLOGY

The sample, 90 White male undergraduate social science or humanities majors, ranging in age from 17 to 22, was divided into four groups: 30 nonusers, 30 who preferred marihuana, 15 who preferred amphetamines, and 15 who preferred barbiturates. Subjects completed a questionnaire devoted to biographical information and drug use, a second series of questions reporting the effects of their favorite drug, and the Omnibus Personality Inventory, a test of 14 scales relevant to performance and personal growth in the college setting. The OPI scales include thinking introversion (liking for ideas and philosophical thought), theoretical orientation, aestheticism, autonomy, religious orientation, social extroversion, impulse expression, personal integration, anxiety, altruism, practicality, masculinity-femininity, and response bias. One-way analysis of variance and the Duncan Multiple Range test were performed.

RESULTS

Each drug taking group reported experiences of increased euphoria. The marihuana group indicated increased introspection; the amphetamine group reported increased talkativeness, anxiety, and energy; and the barbiturate group indicated decreased talkativeness, anxiety, energy, and introspection. Nonusers scored significantly higher on religious orientation, social extroversion, and practicality, but lower on impulse expression and autonomy. The marihuana group scored lowest on anxiety level, and highest on personal integration. The amphetamine group showed no mean scores significantly higher or lower than other groups on any OPI scale. Subjects preferring

barbiturates scored significantly lower than any other group on thinking introversion, theoretical orientation, complexity, and personal integration, and highest on anxiety. They also reported highest frequency of drug use.

CONCLUSIONS

In general, the nonusers appeared more conventional and conforming than any of the drug-using groups. Among these, marihuana users appeared less conventional, but more personally composed and integrated, with a preference for reflective thought enhanced by marihuana. The barbiturate group appeared less intellectually inclined and more emotionally distressed than the others, with personality traits concordant with the specific experience of withdrawal derived from the drug. Barbiturate use may be the result of a personal need to avoid cognitive activity and social interaction. Future research should investigate frequency, as well as type, of use.

Davis, Glenn C., and Brehm, Mary L. Juvenile prisoners: Motivational factors in drug use. Proceedings of the American Psychological Association, 6 (Part 1):333-334, 1971.

DRUG	Multi-Drug
SAMPLE SIZE	91
SAMPLE TYPE	Incarcerated
AGE	16-22 years
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	North Carolina
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; MMPI; Army Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	2

PURPOSE

Investigators studied attitudinal and personality traits of youthful offenders, in an effort to establish a set of criteria for determining predisposition to drug use within a criminal population.

METHODOLOGY

The subjects consisted of 91 inmates, ranging in age from 16 to 22, at a North Carolina State Prison juvenile unit, a facility for youthful felons. The sample consisted of 33 nonusers, 24 criminal users under sentence for crimes ranging from breaking and entering to murder, and 34 narcotics law offenders. Subjects were interviewed individually, and then completed a questionnaire dealing with attitudes toward taking medications, typical responses to illness, and concern with personal control, as well as a self-report of the urge to take various agents, ranging from aspirin and coffee to opiates and hallucinogens. Subjects were also asked about actual drug use. MMPI and Army beta IQ scores were available from official records.

RESULTS

The narcotics offenders were more often white, older, better educated, and with higher IQ's. Among the drug users, 80% had used marihuana and hallucinogens, and at least 50% had used opiates, amphetamines, and barbiturates. Nonusers scored low in desire and high in restraint factors, while narcotics offenders scored low in restraint and desire. The criminal user group scored higher on insecurity and curiosity, and denial of effects, and high on fear of loss of control. The two drug using groups scored higher in desire for illegal drugs, with criminal users desiring alcohol to a greater extent than the others. Insecurity was broadly related to most drugs except social stimulants and hallucinogens. Criminal users with higher fear of loss of control craved alcohol rather than hallucinogens or psychotropic agents, which correlated with absence of such fear, and with curiosity.

The MMPI scores for all three groups were similar, revealing insecurity associated with elevations of a majority of scales.

CONCLUSIONS

The three groups of incarcerated subjects display distinct patterns reported elsewhere: an unsusceptible group, an apathetic population marked by little restraint but low desire for drug use, and a highly conflicted population with elevated levels of desire and fears. The factors of insecurity and dissatisfaction with the self, combined with little fear, distinguish between the drug user and nonuser in this criminal population, and this pattern of attitudes indicates general personality maladjustment.

Fitzgibbons, David J.; Berry, David F.; and Shearn, Charles R. MMPI and diagnosis among hospitalized drug abusers. Journal of Community Psychology, 1(1):79-81, January 1973.

DRUG	Multi-Drug
SAMPLE SIZE	139
SAMPLE TYPE	Treatment (inpatient)
AGE	Adolescents; Adults (14-25)
SEX	Both Sexes (about 1/2 of each)
ETHNICITY	White
GEOGRAPHICAL AREA	Hartford, Connecticut
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	7

PURPOSE

A number of studies have shown illicit drug users to have a significantly greater proportion of abnormal profiles as tested by the Minnesota Multiphasic Personality Inventory than do nonusers. The most general conclusion emerging from these studies is that the use of illicit drugs is found with great frequency among those with pre-existing emotional problems. Investigators at the Institute of Living, Hartford, Connecticut, studied a population of young hospitalized psychiatric patients to determine whether certain patterns of illicit drug use are associated with specific types or degrees of pathologies, as indicated by MMPI findings and psychiatric diagnoses.

METHODOLOGY

The MMPI was administered on admission to 139 White, middle class male and female patients between ages 14 and 25, with a mean age of 20 years. Subjects also completed a drug use questionnaire categorizing them as nonusers; users of marihuana only, plus occasional amphetamines; users of marihuana, amphetamines and hallucinogens; users of these drugs and barbituates but not narcotics; and users of narcotics as well as other drugs. Diagnoses were trichotomized into psychotic, latent psychotic, and nonpsychotic.

RESULTS

Neither psychiatric diagnosis nor the MMPI neurotic-psychotic index was successful in discriminating among the drug groups. Among the patients, 31 were nonusers; 22 used marihuana and amphetamines only; 14 used marihuana, amphetamines and hallucinogens; 28 used these and barbiturates; and 44 used all the forementioned plus narcotics. All five groups were quite similar in their

abnormal MMPI profiles, with the mean neurotic-psychotic index for each group being well within the psychotic range. More than 70% of the sample were diagnosed as either psychotic or latent psychotic. Scale 8 showed the most frequent elevation above a normal score of 70. Nonusers tended to show high scores on Scale 7, indicating anxiety and social inhibition, while marihuana users rated high on the K scale indicating lack of social controls. Scale 5, the passivity score, suggests that male drug users reject the culturally-prescribed assertive male role while female users identify with the unassertiveness of the traditional female role. None of these relationships have predictive value, although they are statistically significant.

CONCLUSIONS

The most compelling conclusion that can be inferred from the data of this study is that many of the personality characteristics which have been found in previous studies to be associated with illicit drug abuse are not specific to it, but are common to all young people who are experiencing psychological distress. Scale scores also suggest that users of marihuana may be more identified than other types of users with a rebellious subculture. In general, drug use may be seen as an illegal but available means of attempting to relieve the stress of emotional or psychiatric disturbance.

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Gossett, John T.; Lewis, Jerry M.; and Phillips, Virginia Austin. Psychological characteristics of adolescent drug users and abstainers. Some implications for preventive education. Bulletin of the Menninger Clinic, 36:425-435, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	100
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	51 Male; 49 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Dallas, Texas
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	April 1970
NO. OF REFERENCES	10

PURPOSE

The success of drug abuse programs depends upon an accurate assessment of its subjects. Theories of the characteristics which distinguish drug users from their nonuser peers range from a hippie-radical stereotype to a psychopathological profile in which drug use is one facet of multidimensional disturbance. Drug use has been viewed as analogous to adult use of alcohol, with patterns of frequency and excess considered abusive, but occasional use deemed normal. Finally, in the light of studies reporting no discernible psychological differences between nonusers and users of marihuana only, but considerable difference between these groups and users of more than one drug, some investigators have proposed a continuum ranging from single to multiple to gross-multiple use, the latter two categories being composed of mildly to severely disturbed individuals. Assuming that antidrug educational efforts must match the intended subject sample, researchers surveyed Dallas high school students in an effort to assess individual psychological characteristics of users and nonusers.

METHODOLOGY

The sample consisted of 51 male and 49 female students, ages 15 to 18, attending a public high school in Dallas, Texas, selected for its likelihood of parental consent and cooperation. Subjects completed a 72-item structured interview schedule designed to investigate the individual student's academic background, extracurricular activities, part-time work, dating and friendship patterns, family functioning, parent drug use, political and philosophical beliefs, personal drug experiences, motivations for drug use or abstinence, plans for future use, knowledge about drugs, and self-estimates of emotional maturity. The interviewing psychologists and psychiatrists also estimated the subject's overall level of psychological functioning.

RESULTS

Most of the students were academically average or above, from middle to lower middle class families in which at least half the parents had attended college. Eighty-five were Protestants, eight were Catholics, and seven were unaffiliated with any church. Less than one-fourth had participated in school sports. Only seven reported feeling socially estranged, and 50 rejected the concept of a "generation gap." The 17 abstainers and the 59 users of alcohol and tobacco were combined into a single group of 45 females and 31 males. Among the 24 drug users, 16 were classified as single, five as multiple, and three as gross-multiple users. Marihuana was the single drug most widely used. Multiple users reported experimenting with marihuana two, five, 15, 20, and 100 times, with occasional use of hashish and LSD. The gross-multiple users reported marihuana, hashish, dexedrine, mescaline, codeine, LSD, methedrine, heroin, morphine, and cocaine. Marihuana was the initiatory drug for most.

A majority of the drug users had lower grades than the nonusers, a phenomenon preceding drug use, and they belonged to no school organizations. While 63% of the drug users attended church at least twice monthly, 83% reported attaching little importance to religious beliefs. Questionnaire items indicating behavioral trouble, including failure or expulsion from school, arrest, or neighborhood disturbance, revealed that 75% of the drug users responded positively three or more times, while only 17% of the nonusers did so. The interviewers rated 54% of the drug using group, but only 20% of the nonusers, as being below average in psychological functioning, with degrees of difficulty ranging from slight to severe.

CONCLUSIONS

Differences between users and nonusers in this sample did not conform to the hippie-radical model, but to the profiles linking drug use with a variety of psychological symptoms. In planning anti-drug education for such students, consideration of these findings points to a broader approach which increases students' abilities to cope more effectively with problems of living.

Green, Logan L., and Haymes, Michael. Value orientation and psychosocial adjustment at various levels of marihuana use. Journal of Youth and Adolescence, 2(3):213-231, 1973.

DRUG	Cannabis
SAMPLE SIZE	501
SAMPLE TYPE	Students
AGE	Adults (College age)
SEX	Both Male and Female (approximately 50% each)
ETHNICITY	White
GEOGRAPHICAL AREA	Chicago, Illinois
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; CPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	30

PURPOSE

The attempt was made to replicate and extend the personological findings of previous studies, to characterize the value orientation structure of undergraduates at various levels of marihuana use, and to understand the relations among certain psychosocial variables and value structure.

METHODOLOGY

The study employed 501 undergraduate psychology students at the University of Illinois. All subjects were White and were divided approximately equally between males and females. Three measuring devices were administered: (1) the California Psychological Inventory, (2) the Value Orientations Questionnaire (adapted from F. Kluckhohn's theory of variation in value orientations), and (3) a short biographical questionnaire inquiring into basic demographic information, grade point, sex, and extent of marihuana usage. Students were classified as Frequent Users, Occasional Users, Nonusers, and Adamant Nonusers. One-way multivariate analyses of variance were performed.

RESULTS

Group differences in reported marihuana use corresponded to radically different CPI and value orientation scores. The CPI portrayed the Frequent User, in comparison to the other groups but especially relative to the Adamant Nonuser, as likely to be interpersonally and intellectually more effective, trusting in others, confident, and to possess a greater degree of ego strength. The Adamant Nonuser appeared to be more submissive in general, lacking in self-insight, dependent on external structure, and judgmental. In terms of value orientations, the Adamant Nonuser felt that nature was more subjugating than did the other groups; his standards were extrinsic, and he had

a desire for order, associated with an emphasis on authority supported by a belief that humankind was naturally evil or dangerous, and that one ought to "keep things as they are."

CONCLUSIONS

The sample of undergraduates was fairly homogeneous. All of the groups tended to be similar in terms of their profile shapes, both personologically and in their value orientations; however, their relative standing differed quite significantly. In line with this notion of homogeneity, it should be recognized that Traditionalism accounted for 73% of the common factor space. Thus, a major latent structure underlying the value orientation system of members of this sample can be summarized as Traditionalism, and another as Self-Expression. But there is a certain degree of movement away from the center, represented best by the Frequent User group at one extreme and the Adamant Nonuser group at the other. Users tended to be more associated with the Self-Expression factor, while Adamant Nonusers tended to be more associated with the Traditionalism factor.

Since the attitudes and values associated with marihuana use, and the nature of the marihuana experience itself, may have changed with time, the psychosocial picture of members of each of the marihuana-use categories ought not be applied to persons very much older or younger than those persons in the study sample. That it does accurately portray the population sampled (White college sophomores in an urban commuter school) is attested to by the similarity of results obtained in both replications of this study. As the meaning of the marihuana experience changes over time, both intrapersonally and societally, the values and personality characteristics associated with users may also change. Social scientists must be alert to this and continue to reassess past research, and their own beliefs, regarding the user and the nonuser of marihuana.

Green, Mary G.; Blake, Brian F.; Carboy, John J.; and Zenhausern, Robert J. Personality characteristics of the middle-class high school drug user. Proceedings of the American Psychological Association, 6(Part 2):559-560, 1971.

DRUG	Not Specified
SAMPLE SIZE	498
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Valley Stream, New York
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Cattell High School Personality Questionnaire
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	6

PURPOSE

Little is known about drug use among middle class high school students. Personality characteristics differentiating users from nonusers may be either related to or independent of academic capacity. Investigators explored these relationships at a suburban New York high school.

METHODOLOGY

The population from which the sample was derived consisted of 498 students of both sexes, enrolled in a public high school serving a middle class suburban community. The original cross-section of the student population included 39% of the sophomores and 38% of the senior class, who completed the Cattell High School Personality Questionnaire as part of a test battery number-coded for anonymity; a subsequent drug use questionnaire made use of this same test number. Students were classified as users and nonusers, users being those who reported any drug use regardless of frequency or type; students were also identified as honors, regent, and nonregent students by academic curricula to which they had been previously assigned by school authorities on the bases of IQ and achievement scores. Nineteen male and nineteen female students from each curriculum were randomly selected for the experimental sample, a total of 228 subjects.

RESULTS

Nonusers scored significantly higher than users on scales measuring emotional stability, self-sufficiency and self-control, but lower in dominance and heedlessness. Among users, honors subjects scored significantly higher in intellectual power, emotional stability, social confidence and sensitivity than did nonregent subjects. Users appeared more vulnerable to frustration, headstrong, reckless, and group-dependent than nonusers, a constellation of traits unrelated to academic capacity or achievement.

CONCLUSIONS

Perhaps there is little validity for the popular belief that drug use dynamics differ as a function of intellectual capability. However, the picture of the honors user is that of an individual who is intellectually alert, confident, sensitive and mature to a point, while the nonregent user is intensely shy, cynical, unstable, and intellectually less able to handle abstract thinking. The data suggest that therapeutic intervention programs could profitably be structured differently for different academic groups; that such structuring is feasible, and that on the basis of certain predictive personality traits, preventive counseling could be initiated prior to drug use. The investigators stress the importance of further studies making use of investigative techniques other than self-report.

Grossman, Jan Carl; Goldstein, Ronald; and Eisenman, Russell. Openness to experience and marijuana use: An initial investigation. Proceedings of the 79th Annual Convention of the American Psychiatric Association, 1971. pp. 335-336.

DRUG	Cannabis
SAMPLE SIZE	316
SAMPLE TYPE	Students
AGE	Adults (18-64)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Personal Opinion Survey; California F Scale; Manifest Anxiety Scale; Marlowe Social Desirability Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	15

PURPOSE

Investigators at Temple University and Pennsylvania State University tested the hypothesis that marihuana use among undergraduates is correlated with creativity, imagination, and openness to new experiences.

METHODOLOGY

The 316 subjects, all undergraduates enrolled at Temple or Pennsylvania State Universities, took a battery of tests including the Personal Opinion Survey, the California F Scale, the Manifest Anxiety Scale, the Marlowe-Crowne Social Desirability Scale, and a questionnaire requesting information about biographical data and frequency of marihuana use, in which they classified themselves as nonusers, experimental but discontinued users, occasional users, and regular users smoking marihuana at least once per week. Subjects were also asked about use of other drugs.

RESULTS

With increased levels of marihuana use, creativity and adventuresomeness scores increased, and authoritarianism decreased. Other scores were not significant. Males tended to be heavier users than females, Jews more than Protestants or Catholics. Nonusers and regular users tended to be older than experimental or occasional users. Use of other drugs increased with higher levels of marihuana use.

CONCLUSIONS

Findings supported the hypothesis of the study. Explanations of marihuana use based on character defect seem inadequate, since this drug was associated with traits usually deemed valuable, such as creativity. People who are more open to new experiences, for personal or cultural reasons, tend to seek out these experiences, leading them to try marihuana and experiment with other drugs. The investigators caution that these findings may relate to the present sample only, however.

Hager, David L. "Adolescent Drug Use in Middle America: Social-Psychological Correlates." Ph.D. Dissertation, Michigan State University, 1970. Ann Arbor, Michigan: University Microfilms, No. 71-11,854. 203 pp.

PURPOSE

The literature shows that soft drug use (marihuana, hallucinogens, and amphetamines) is increasingly becoming a White, middle class phenomenon. This study sought to determine differences in drug use by age, sex, and school system among three different socioeconomic levels of middle class youth in nonmetropolitan, White, midwestern communities. A second purpose was to provide an analysis of differential drug use in relation to the following four classes of variables:

(1) Participation in other forms of deviant behavior such as smoking, drinking, and heterosexual activity. Knowledge of drug argot and perception of availability of drugs were included as measures of symbolic deviance.
(2) Traditional value orientations--authoritarianism, college plans, ability to defer gratification, family orientation, school grades, peer orientation, political views, religious orthodoxy, and status aspirations.
(3) Socializing agencies of family, religion, and school, as well as an important element of social structure--the socioeconomic status of the individual.
(4) Ego strains of alienation, affectional deprivation, depression, relative deprivation, and lack of peer involvement.

METHODOLOGY

Three schools were selected for study: School A, located in an upper middle class community of business and professional people; School B, situated in a common man town composed mainly of lower middle class families; and School C, located in a stable working class community. Twenty-three indexes and several single items were developed to measure the variables. Grades 8 through 12 in each school were given a pre-tested self-administered opinionnaire in the fall of 1969, resulting in data from 4,230 students (81 per cent of the total enrollment of the schools). Statistical procedures used included Chi-square tests and correlational analysis.

RESULTS

Marihuana, hallucinogen, and amphetamine use were: (1) positively related to higher socioeconomic school system milieu; (2) higher among males at Schools A and B, and (3) higher among older adolescents at Schools A and B. Hard drug use was not related to school system or age, and males were higher only at School B. The affluent system, School A, had soft drug use rates nearly double those of either Schools B or C,, and soft drug use sharply increased at age 15 to 16, indicating a critical period in the initiation of many young people into drug abuse. It was also found that the general social class level of the school system, rather than the individual's particular social class membership, accounted for the greater variance in soft drug use.

Evidence was also found for the existence of a general deviant subculture. Participation in soft drug use was found to be positively related to drug sales, hard drug use, smoking, drinking, heterosexual behavior, knowledge of drug argot, and greater perception of easy drug availability.

Negative orientations toward traditional values were related to the use of drugs, substantiating the existence of a "hang-loose" ethic. Measures of parental congeniality, church attendance, and participation in school organizations generally showed significant but low inverse associations with drug use, while the effect of the individual's socioeconomic class status as related to drug use was very low and inconsistent in direction.

Finally, ego strains of depression and affectional deprivation showed significant, but low to very low inverse relationships with drug use. Alienation, relative deprivation, and lack of peer involvement were not significantly associated with drug use.

CONCLUSIONS

Implications in the study for the establishment of educational programs, counseling practice, and future research are presented.

Heller, Margaret E., and Mordkoff, Arnold M. Personality attributes of the young, nonaddicted drug abuser. The International Journal of the Addictions, 7(1):65-72, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	67
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults
SEX	42 Male; 25 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Program/Clinic Statistics; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	13

PURPOSE

Researchers examined personality profiles of youthful participants in a private drug rehabilitation group to discern differences between these nonaddicted multi-drug users and the hardcore heroin addict, and to discover what personal factors correlated with continuation in therapy, and with dropping out.

METHODOLOGY

The MMPI was administered to 67 male and female nonaddicted drug users, participants in Encounter, a private, nonresidential drug rehabilitation program in New York City. The sample was divided into four groups. Group A, consisting of 12 males and eight females, had been in therapy for less than three months and were considered the most disturbed members of the program. Group B, 13 males and four females, had been in therapy for at least four months. Group C, nine males and ten females, completed ten months of treatment or were being phased out. Group D, termed "splittees", eight males and three females, were recontacted for this study after leaving treatment within two months against staff recommendations. Drugs employed by the subjects included marihuana, psychedelics, barbiturates, amphetamines, tranquilizers, toluine, and heroin. The MMPI was scored for the 14 standard scales, and also for Welsh's first and second factor, A and R, manifest anxiety, ego strength, and dominance. Profiles were compared with those of narcotics addicts and nonaddicted multiple drug users derived from earlier studies.

RESULTS

Profiles of the three groups in therapy at Encounter resembled only those of the nonaddicted multiple drug users reported in other studies, with elevated F, D, Pd, and Sc scores. In general,

scales measuring qualities of anxiety, low self-esteem, depression and unreality were less elevated in the more advanced stages of treatment. Self-confidence and assertiveness improved with treatment. The "splittee" group had significantly lower scores on scales D, Pt, A, and At, and higher scores on K and Ma. The pattern of results was that subjects who left treatment prematurely reported less overt depression, self-critical tendencies, disphoria and anxiety than those remaining in the program, and also displayed more antisocial tendencies.

CONCLUSIONS

Findings indicate that two general types of drug abusing personalities exist: one with little evidence of anxiety, guilt, insecurity or depression but marked antisocial tendencies, and the other, also somewhat antisocial but depressed and anxious. The investigators suggest that the former type may correlate with heroin addiction, and the latter with less severe forms of multiple drug abuse. There seem to be predisposing personality factors which help determine whether an abuser will remain in treatment: subjects reporting relatively high amounts of anxiety and depression are apparently more likely to continue in rehabilitation therapy; those reporting little psychological discomfort seem to leave easily. Subsequent investigation should concentrate not only on the issue of who remains in treatment, but who is aided by it.

Henriques, Eileen; Arsenian, Jean; Cutter, Henry; and Samaraweera, Albert B. Personality characteristics and drug of choice. The International Journal of the Addictions, 7(1):73-76, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	98
SAMPLE TYPE	Treatment (inpatient)
AGE	Not Specified
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Boston, Massachusetts
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	2

PURPOSE

Investigators at the Drug Addiction Rehabilitation Center of Boston State Hospital tested youthful inmates to test the hypothesis that certain personality traits correlate with specific drug preferences.

METHODOLOGY

The sample consisted of 98 youthful male and female patients hospitalized for drug abuse. Subjects were grouped according to their drug of choice as 56 heroin users, 29 barbiturate users, and 18 amphetamine users. It was hypothesized that clinical symptoms of anxiety and depression would differ among these groups distinguished by their preference for a specific drug effect; for example, drugs of the amphetamine type which are mood elevating would be preferred by more depressed patients, while sedative drugs would be preferred by more anxious subjects. All participants took the MMPI. The T scores for each patient were rank ordered, and the ranks were subjected to a three group one-way analysis of variance and X^2 analysis.

RESULTS

The depression and anxiety index scales did not differ significantly among the groups; however, male drug users tended to score higher on the paranoia and mania scales than did females, with amphetamine and heroin users scoring higher than barbiturate users, in that order. Proportionately more barbiturate users ranked high on the depression scale--45% as compared with 27% of the heroin users and 11% of the amphetamine users.

CONCLUSIONS

The results of this study do not support the hypothesis that amphetamine users are psychologically depressed and therefore prefer stimulant drugs or that barbiturate and heroin users are anxious and therefore choose depressants. The researchers are continuing follow-up studies to explore the effects of the test-taking time period upon these findings, and to investigate whether the results are due to personality factors predating drug use, or are the product of drug use itself.

Hill, Polly O. "Latent Aggression and Drug-Abuse: An Investigation of Adolescent Personality Factors Using an Original Cartoon-O-Graphic Aggressive Tendencies Test (COGATT)." Ph.D. Dissertation, Case Western Reserve University, 1972. Ann Arbor, Mich.: University Microfilms, No. 72-76, 165. 185 pp.

PURPOSE

Aggressive behavior and drug abuse were investigated in light of three criteria of personal and social adjustments. Specifically, the study analyzed the relationships or differences among the following variables: (a) adolescent aggressive "acts" and aggressive behavioral tendencies; (b) drug abuse and aggressive behavioral tendencies; (c) "sensation seeking" and "purpose-in-life" as related to drug abuse and aggression; and (d) sex differences in the dimensions of "sensation seeking," "purpose-in-life," drug abuse and aggressive behavioral tendencies.

METHODOLOGY

Two hundred forty-eight subjects were drawn from two suburban school systems and from six junior high schools in Cuyahoga County, Ohio. The sample consisted of 94 aggressive and 25 drug abusing male and female adolescents, and two comparison groups of 94 non aggressive and 25 non drug abusing male and female adolescents enrolled in grades seven through nine (age range was 12 to 15 years). The variables of sex, age, grade, IQ, and socioeconomic status were equated for a matched group of adolescents.

For purposes of measuring adolescents' aggressive tendencies, Hill's Cartoon-O-Graphic Aggressive Tendencies Test (COGATT) was used. For measuring "thrill" or "sensation seeking," Zuckerman's Sensation-Seeking Scale (SSS) was used. For measuring adolescents' motivations or "purpose-in-life," Crumbaugh's Purpose-in-Life Test (PILT) was used.

Multivariate analysis of variance, univariate analysis of variance, multiple comparison, and point biserial correlation coefficient were the statistical measures used to evaluate the data. A .05 level was set to test for significance of results.

RESULTS

The results on the three instruments reported in this study yielded significant differences among the four groups; I (AGG), II (N-AGG), III (DA), and IV (N-DA) ($p<.001$). The "aggressive acting out" and drug abusing adolescents in both school systems showed significantly higher aggressive tendencies scores on the COGATT, showed significantly higher "thrill" or "sensation-seeking" scores on the SSS, and significantly lower motivation or purpose-in-life scores of the PILT than did the nonaggressive and non drug abusing adolescents.

A small but significant sex difference ($p<.05$) was found on the COGATT. Males showed significantly greater aggressive tendencies in comparison to females.

CONCLUSIONS

This study seems to support some of the previous findings reported in the literature. Aggressively designed cartoons with high cue relevance were very effective in illiciting aggressive tendencies among the "aggressive acting out" and drug abusing male and female adolescents. The concept of drug abuse and its relationship to aggressive behavior is an area that remains wide open for more extensive research.

Hogan, Robert; Mankin, Donald; Conway, John; and Fox, Sherman. Personality correlates of undergraduate marijuana use. Journal of Consulting and Clinical Psychology, 35(1):58-63, 1970.

DRUG	Cannabis
SAMPLE SIZE	148
SAMPLE TYPE	Students
AGE	Adults
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Baltimore, Maryland
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; CPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	10

PURPOSE

Researchers at Johns Hopkins and Lehigh Universities tested students to determine the personological factors underlying marihuana use in a college population.

METHODOLOGY

The sample consisted of 76 male undergraduates at Johns Hopkins, tested individually at the student union and in psychology classes, and 72 undergraduate men enrolled in introductory psychology courses at Lehigh. Subjects completed the California Psychological Inventory and a biographical questionnaire concerning use of marihuana and other drugs, and reported academic and extracurricular activities. Subjects were classified as 37 frequent users, 23 occasional users, 44 nonusers, and 44 principled nonusers who stated that they would never smoke marihuana.

RESULTS

Users as a group scored highest on capacity for status, social presence, achievement via independence, flexibility, and empathy, but lowest on sociability, responsibility, socialization, communality, and achievement via conformance. The pattern was the reverse for the nonusers. Frequent users were more often fraternity members than were the other three groups. The data indicated a trend for freshmen and sophomores to cluster in the principled nonuser category, and to have slightly lower grades, and for frequent and occasional users to major in the humanities and social sciences. Of the users, 61.7% had also used hashish, 18.3% opium, 30% amphetamines, and 25% LSD, while one subject had experimented with heroin. No group indicated defective moral development.

CONCLUSIONS

In the present sample, users and nonusers are indistinguishable with regard to their secondary education, extracurricular activities and athletic participation. Compared to nonusers, users are more socially skilled, with a broader range of interests, are more adventuresome and more concerned with the feelings of others, as well as more impulsive and nonconforming. Nonusers, while pleasant, responsible, considerate and dutiful, tend to lack spontaneity and verve, and to be perhaps too deferential to external authority, narrow in their interests, and over-controlled. The personality characteristics of both groups present complex patterns, neither of which is necessarily superior or less socially or morally mature. In general terms, marihuana use appears more properly classed as an amoral activity, and current disapproval of it may reflect a cultural emphasis rather than a truly moral judgment.

Hollaran, Duane Peter. "The Personality Characterisitcs of Middle and Upper Middle Class Adolescent Drug Abusers." Ph.D. Dissertation, Arizona State University, 1972. Ann Arbor, Michigan: University Microfilms, No. 72-23, 169. 134 pp.

PURPOSE

An adolescent drug abusing group was compared to an adolescent nonabusing group from the middle and upper middle classes to determine the personality characteristics which distinguish the two groups. The effort was made to describe the personality characteristics of adolescent drug abusers, and to compare female and male adolescent drug abusers to discover whether the variable of sex was significant.

METHODOLOGY

The subject group consisted of 50 adolescent drug abusers, 25 males and 25 females, who were inpatients at a Mental Health Unit of a general hospital and had abused drugs on a regular basis. The comparison group consisted of 25 males and 25 females who, according to self-report, had not abused drugs. Both the subject and comparison groups were from the middle and upper middle classes, as determined by family income.

The MMPI was used to evaluate the personality characteristics of the subject and comparison groups. Only the five scales for Hysteria, Psychopathic Deviate, Schizophrenia, Hypomania and Social Introversion were used. In studies dealing with the college age drug abuser, these scales were those which distinguished abusers from nonabusers.

RESULTS

There were no significant differences between adolescent drug abusers and nonabusers on the Hysteria and Social Introversion Scales. The T-Scores from the Psychopathic Deviate, Schizophrenia and Hypomania Scales showed a significant difference at the .01 level of confidence between abusers and nonabusers. In each instance, the mean scores of the abusers were above the T-Score of 70 on the MMPI profile. No significant difference was found between male and female abusers on any of the selected scales, and interaction of sex and drug abuse was not found to be significant at the .05 level of confidence.

CONCLUSIONS

The findings indicate that there are certain personality characteristics which distinguish adolescent drug abusers from nonabusers. The drug abusers were more nonconforming and tended to reject social conventions. Although the abusers were not necessarily hesitant in forming new relationships or passive in groups, they tended to lack the ability to form satisfactory emotional relationships. Generally, the drug abusers were more impulsive and unpredictable, and tended to be elated, but were unstable in moods, restless and easily distracted. They also lacked the ability to anticipate the consequences of their behavior. No significant difference between male and female abusers on the selected MMPI scales were found.

Holroyd, Kenneth, and Kahn, Malcolm. Personality factors in student drug use. Journal of Consulting and Clinical Psychology, 42(2):236-243, 1974.

DRUG	Multi-drug
SAMPLE SIZE	144
SAMPLE TYPE	Students
AGE	Adults
SEX	77 Male; 67 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Coral Gables, Florida
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires: Kahn Holroyd Drug Involvement Scale; College Behavior Questionnaire; Personality Research Form
DATE(S) CONDUCTED	1971 - 1972
NO. OF REFERENCES	20

PURPOSE

Investigators at the University of Miami attempted to ascertain whether nonusers, moderate users and heavy users of illicit drugs differ in general personality characteristics, and to describe these traits, examining male and female students separately.

METHODOLOGY

The sample group consisted of 77 male and 67 female students selected by random sample solicitation. Each subject was rated as a nonuser, moderate user, or heavy user according to his response to the College Behavior Questionnaire and the Kahn and Holroyd Drug Involvement Scale, which systematically evaluates types of drugs and frequency of usage. Typically, moderate use subjects reported some ingestion of marihuana and hashish and possibly infrequent experimentation with hallucinogens, barbiturates, or amphetamines; heavy users reported using large amounts of marihuana or regularly using hallucinogens and other drugs. Subjects also completed the Personality Research Form A, containing 300 items grouped into one validity and 14 content scales testing homogeneity, stability, and other personality traits. Content scales measured bipolar personality dimensions, with meaning attached to high or low scores as against a norm based on college student samples. Multivariate analysis of the data was employed, with males and females treated separately.

RESULTS

Of the sample, 22 male and 23 female subjects were classified as nonusers, 30 male and 28 female subjects as moderate users, and 21 male and 16 female subjects as heavy users. Both male and female users, particularly heavy users, attributed more liberal political beliefs to themselves than did nonusers, and were more casual in grooming. Among males, but not among females, drug

use was associated with lower grade point average. Male moderate and heavy users displayed more similarity to each other than nonusers, valuing immediate pleasure and spontaneous social activity over the postponed gratification necessitated by striving toward distant goals. Male users were more impulsive and emotionally expressive, self-reliant, rebellious toward external restraints and somewhat inclined toward thrill seeking or risk taking, and relatively less concerned with impressing others or seeking their approval; they also placed less emphasis upon achievement than did nonusers. Female users, on the other hand, were similar to males in willingness to take risks, as well as in nonconformity, ambition, playfulness and inquisitiveness, but indicated high achievement strivings. Female nonusers tended to be controlling, nurturant, and cautious.

CONCLUSIONS

Both male and female drug users tend to deviate from the traditional norms of modal personality characteristics and goals for their respective sexes. Inquisitiveness and nonconformity characterized both male and female users, as did a lack of respect for traditional values. Male heavy users, with their impulsiveness and curiosity, and female heavy users, with their achievement needs, appear to have rejected their cultural stereotypes, which, by contrast, male and female nonusers typify. The findings challenge the validity of generalizations about illicit drug use based on data derived from a single sex.

Jessor, Richard; Jessor, Shirley L.; and Finney, John. A social psychology of marijuana use: Longitudinal studies of high school and college youth. Journal of Personality and Social Psychology, 26(1):1-15, April 1973.

DRUG	Cannabis
SAMPLE SIZE	949 High School; 276 College Students
SAMPLE TYPE	Students
AGE	Adolescents and Adults
SEX	Both Male and Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Rocky Mountain State
METHODOLOGY	Survey; Longitudinal
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	1968 - 1971
NO. OF REFERENCES	18

PURPOSE

Problem behavior theory, consisting of personality, perceived environment, and behavior systems, was employed to account for variation in marihuana use among junior high, senior high, and college students, both male and female.

Marihuana use is considered purposive, goal-oriented, and functional. Since no single variable provides a sufficient explanation for marihuana use, this study postulated a multivariate network of person and situation attributes logically connected to this behavior. Four general hypotheses were examined: (1) that marihuana use should co-vary with other kinds of problem behaviors; (2) that variation in marihuana use should be systematically related to variation in the personality and perceived environment variables; (3) that the onset of marihuana use among nonusers should be predictable over a time interval from initial differences on those same personality and social variables measured at the beginning of the interval; (4) that those who become marihuana users should show greater relative change in the personality and social variables than those who remain nonusers.

The research design enabled both cross-sectional comparisons between nonusers and users on variables in each of the systems and longitudinal comparisons between those who shifted to user status over a one-year interval and those who remained nonusers.

METHODOLOGY

Subjects were drawn from two separate but parallel longitudinal studies, one of junior and senior high school students, and one of college students at a large university in the same community in one of the Rocky Mountain states. A random sample of 2,220 high school students, stratified by sex and grade, was contacted by letter and invited to participate in a four-year

study of personality and social development in youth. Parental permission was requested. In year one, 949 students participated, with data collected in April, 1969. In year two, 81% were retained, and of these 82% were retained in year three.

A year after the high school study, a random sample of 487 college freshmen, stratified by sex, was approached, and 276 agreed to participate. Year one data was collected in April, 1970. In year two, 90% were retained. Any comparisons between these two studies always refer to the same points or intervals in time.

Data were collected by a 50 page questionnaire requiring approximately two hours to complete, consisting of psychometrically developed scales assessing personality, social and behavior variables. A four page section dealt with various aspects of drug use experience and included four questions designed as a scale of increasing involvement with marihuana (the marihuana behavior report (MBR) scale). Scores on this scale were used to establish contrasting marihuana involvement groups, which were then used to examine the relevance of the sociopsychological variables and analyze the cross-sectional data used to test the first two hypotheses. For testing the latter two hypotheses, contrasting groups of users vs. nonusers were established and these were employed to examine whether variables taken in the initial year were predictive of the shift from nonusers to user status by the subsequent year.

RESULTS

Prevalence of marihuana use was comparable for both sexes at each school level, and increased substantially with age.

Cross-sectional Analyses

Junior high, senior high, and college data provided strong and consistent support for the first two hypotheses. The consistency of the findings suggested the existence of a social-psychological constancy, a continuity in the meaning and function of drug use among the young. To further assess the explanatory value of the theoretical network, multivariate analyses were performed.

Longitudinal Analyses

In order to examine hypotheses three and four, two groups were compared: nonusers in year one who remained such in year two, and nonusers who became users. The high school data provided support for hypothesis three, showing that there were significant differences between those who remained nonusers and those who became users. These differences were in the problem-prone direction; occurred on measures of personality, environment and behavior; and were true for both males and females.

Stepwise multiple regression analyses were performed to investigate the extent of the predictability of the shift from nonuser to user, and these correlations were significant, increasing confidence in the utility of the theoretical variables. Discriminant function analysis was also employed to assess utility.

Using the high school data, the procedure used to test hypothesis four was to compute residual gain scores for each group based on the discrepancy between a subject's actual subsequent year score and the score which would be predicted for him from the regression of subsequent year scores on initial year scores. Nearly all the differential changes were in the theoretically expected direction, and a number of these were significant. The amount of theoretically expected changes on the variables was associated with the shift in behavioral status from nonuser to user.

The college study data, however, were not supportive of the longitudinal hypotheses; there was no support for hypothesis three, and only slight support for hypothesis four.

CONCLUSIONS

The study makes it clear that personality plays a significant role in marihuana use, and is central to variation in drug use, whether there is high social support for it or not. Even when different intensities of marihuana use are considered, the same variables distinguish nonusers from users or moderate from heavy users. This social-psychological constancy implies that the meaning of marihuana use is widely shared and that there are processes of socialization and even institutionalization to which youth of all ages are exposed.

There are, however, two differences between high school and college levels: (1) the variable of social criticism is more related to marihuana use in college than in high school, and low expectations for achievement is significantly related to marihuana involvement in junior and senior high school, but not at the college level; (2) whereas the same variables were strongly predictive in the high school sample for determining the shift from nonuser to user status, this was not true of the college sample. This may be due to the relatively higher rates of college use. Prediction of onset at college level may depend more on environmental factors than on the systematic pattern of variables specified in problem behavior theory.

The findings of this study are consonant with other reports in the literature and with the findings of the five year project. The social psychology of problem behavior theory is widely applicable and helps reveal commonalities between marihuana use and other behaviors rather than emphasizing its uniqueness.

Jones, Allan P. Personality and value differences related to use of LSD-25. The International Journal of the Addictions, 8(3):549-557, 1973.

DRUG	LSD
SAMPLE SIZE	49
SAMPLE TYPE	Volunteer
AGE	Cross-Age (16-28)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Texas
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Miskimins Self-Goal-Other Discrepancy Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	15

PURPOSE

Previous studies relating personality profile to use of LSD have given rise to four hypotheses: that users have a less adequate understanding of their motivations and interpersonal relationships; that the behavior of users is less consistent with their professed values; that users feel less in control of their lives; and that users are less competent in fulfillment of academic and career plans. Investigators at Texas Christian University tested these hypotheses in a high school and college age population.

METHODOLOGY

Volunteer subjects, solicited by personal contact with guaranteed anonymity consisted of 21 light users (ingesting LSD up to three times per year), ten medium users (up to once a month), and eight heavy users (more than once a month), ranging in age from 16 to 28, and in education from tenth grade through two years of graduate school. Most subjects were single undergraduate males. Ten nonusers, matched to users in age and education, served as controls. Subjects participated in a two-hour in-depth interview with a graduate student in psychology, which was taped and evaluated by two additional interviewers acting as judges. Participants were rated on a scale of 1 through 7 as to self-understanding, and the extent to which the subjects reflected societal goals and values, as well as being ranked on a scale of 1 through 9 in terms of variables on the Miskimins Self-Goal-Other Discrepancy Scale. Ratings by the interviewer and judges were averaged for each subject. Each scale was correlated with level of use, and a one-way analysis of variables was performed.

RESULTS

There was a general negative relationship between drug use and 1) self-understanding, 2) consistency between values and behavior, 3) adherence to social values, and 4) success, all of which varied in

intensity with frequency of use. Heavy users exhibited the strongest negative correlations. Hostility and creativity, however, were positively related to frequency of use. There were no differences between groups in terms of intelligence, general competency, ability to handle problems, concern for others, or happiness. Users often had high academic aspirations but C+ averages, doing poorly in courses which did not capture their interest, and very well in courses they saw as meaningful. Nonusers generally adhered to traditional values and goals, while users at all levels of frequency expressed discontent with these and a search for more meaningful ones.

CONCLUSIONS

Subjects indicated that use of LSD was often part of their search for self-understanding and personally acceptable values, suggesting that alienation from societal norms preceded drug use. However, they did not seem to have received increased understanding of themselves or others as a result of LSD, with heavy users clearly exhibiting less understanding than nonusers. However, no patterns of general psychological inadequacy emerged among the users. In most of the important domains of competency such as intelligence, creativity, competence on jobs, and capacity to handle their own problems, users were no worse than nonusers. A major discrepancy was the user's sense that he didn't have the desired level of control over his own life, a factor which may be the key to the user's alienation from normal goals, values and institutions. Inadequate functioning by users appears to be a reflection of this alienation, rather than a lack of capacity. The investigators caution against identification of the LSD user as pathological or escapist. Alienation from conventional society, lack of commitment to formal religion, a search for values, a lack of clear goals, and a certain psychological ineffectiveness seem related to use of LSD, possibly as a result of differences between users' and nonusers' life styles rather than basic personality differences.

Kendall, Richard F., and Pittel, Stephen M. Three portraits of the young drug user: Comparison of MMPI group profiles. Journal of Psychedelic Drugs, 3(2):63-66, Spring 1971.

DRUG	Hallucinogens
SAMPLE SIZE	407
SAMPLE TYPE	Volunteer; Treatment (inpatient)
AGE	Adults (18-22)
SEX	229 Male; 178 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI
DATE(S) CONDUCTED	1966-1969
NO. OF REFERENCES	10

PURPOSE

The original "hippies" of San Francisco's Haight-Ashbury neighborhood, viewed as an elite and unique group, were defined as extinct, or considered missing, just at the time when problems of drug abuse, psychiatric casualties, and criminality began to dominate the "scene" they had created. Thus, the original or true hippies have eluded examination. They remain an apocryphal group and any attempt to study the drug-based culture of the Haight-Ashbury since their claimed disappearance has been discounted on the grounds that the current residents of the neighborhood are completely unlike those who first created its image. The purpose of this study was to provide some evidence to counter the myth of the disappearing hippies, and to describe some personality characteristics of past and present residents of the Haight-Ashbury.

METHODOLOGY

Three groups were used for comparison. A sample of 77 males and 70 females was tested using the MMPI between March 1966 and June 1967 as part of a study of personality changes associated with the use of psychedelic drugs. They were among the first drug using residents of the Haight-Ashbury and included a number of those who played a major part in the shaping of the hippie culture. This sample had a median age of 22 with a median education of two years of college.

The Haight-Ashbury Research Project sample of 100 males and 73 females was studied between July 1968 and January 1970. MMPI data were obtained from these subjects as part of a major psychological and psychiatric assessment study. All of these subjects were paid volunteers who lived in or around the Haight-Ashbury. All were predominantly users of psychedelic drugs as opposed to amphetamines, barbiturates or narcotics. The median age of this sample was 21 with a median education of one year of college.

A third sample of young drug users was obtained from inpatients of the Youth Drug Study Unit of the Langley Porter Neuropsychiatric Institute. This sample of 52 males and 35 females, tested between July 1967 and July 1969, included approximately 70% of all patients hospitalized on this ward. All of these subjects were hospitalized for psychiatric problems associated with use of psychedelic drugs, amphetamines or barbiturates. Users of narcotic drugs were excluded from this population. The median age of this sample was 18 with a median twelfth grade education.

RESULTS

The MMPI profiles for both males and females in each of the three groups showed a striking similarity to one another. The first two samples were virtually identical in configuration. There is a suggestion that the early hippies showed somewhat less pathology than did more recent residents of the neighborhood, but there was no support for the contention that the early hippies were significantly different from their followers in basic personality organization.

Characteristic bimodal patterns seen in both the male and female profiles suggested a personality organization based on inadequate impulse control, the relative absence of internalized values, and essentially narcissistic orientation towards others. Similar profile configurations are found typically in groups of delinquent adolescents but, in these samples, extreme scores for both males and females on psychological femininity suggest that they differ from the traditional delinquent in manifesting greater passivity, sensitivity and idealism. The absence of strong masculine tendencies for the male groups is partially accounted for by their relatively high educational status, but may also indicate their acceptance of the matristic or inner-oriented values of the hippie culture.

Elevated indices of pathology for the psychiatric sample may reflect a drug-related psychosis overlaying a character pathology similar to the nonpsychiatric sample; if so, observations are supported which point to an underlying character pathology in drug related psychoses.

CONCLUSIONS

From these findings it would appear that these three groups of young drug users share certain basic personality characteristics. Although they differ in overall profile elevation, and in specific indices of pathology, each group profile indicates a type of character pathology which is consistent with other clinical findings regarding the personality organization of young drug users.

While these findings support the contention that the current hippie population is not significantly different from their now legendary predecessors, it cannot be denied that dramatic changes have taken place in the hippie culture. Not all youthful drug use is based on the same motives or personality organization. Indeed, it is quite true that the current sample of hippie subjects do not all share the utopianism or sense of community that characterized the early hippies. However, the changes observed in the hippie culture or in the life style or drug use of the current hippie population cannot be attributed solely to the influx of a radically different, and presumably less desirable, group of people. While the Haight-Ashbury neighborhood has attracted an increasingly larger group of young people who have little commitment to the hippie ethos, the similarity of the current sample to that of the earlier group suggests that many of these young people, had they come to the Haight-Ashbury a few years ago, might also have been counted among the authentic and idealistic hippies.

Kleckner, James H. Personality differences between psychedelic drugs users and nonusers. Psychology, 5(2):66-71, 1968.

DRUG	Hallucinogens
SAMPLE SIZE	80
SAMPLE TYPE	Students
AGE	Adults
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Cattell 16 PF (Form A)
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	13

PURPOSE

The hypothesis was tested that there exists a personality profile characteristic of the psychedelic drug user. It was hypothesized that drug users, as compared to controls, would be more outgoing, brighter, more dominant, enthusiastic, adventurous, sensitive, experimental, self-sufficient, but less controlled and stable, with greater somatic anxiety.

METHODOLOGY

The Cattell 16PF Form A was administered to a group of 40 male full-time students who were self-described users of psychedelics at least four times monthly, for at least six months prior to interview and who intended to continue use. This group was compared with 40 matched controls. All subjects were of middle class background, with an average of two years of college and no history of mental illness. Group mean scores were calculated on each of 16 personality factors; t-tests were used to determine the significance of the group mean differences. Each group's mean scores were assembled into a single test profile. Since a prediction was made about the direction of the differences, a one-tailed test was employed.

RESULTS

Differences significant at the .05 level or better were found in 12 of the personality factors tested. Of these, nine were in the predicted direction. Users were significantly higher on scales characterizing them as (1) brighter, (2) more aloof, (3) displaying more emotional and somatic manifestations of anxiety, (4) being more paranoid, (5) having less ego and superego strength, (6) being more dominant than nonusers, and (7) more accident-prone. The three significant factors which were contrary to the predicted direction indicated that users were not: (1) more adventurous, (2) more sophisticated, or (3) more insecure than nonusers.

CONCLUSIONS

The hypothesized picture of the psychedelic user was that of an intelligent, artistic bohemian, basically insecure and unstable, but whose defenses include a facade of strength, independence, and unconventionality. Drug users appeared more nonconformist than nonusers, with greater potential for asocial acting out, more creativity, more need for isolation, and less ability for leadership. Further research is needed to clarify the specific personality constellation, syndrome, or type characteristic of the psychedelic drug user.

Knecht, S.D.; Cundick, B.P.; Edwards, D.; and Gunderson, E.K. Eric. The prediction of marihuana use from personality scales. Educational and Psychological Measurement, 32:1111-1117, 1972.

DRUG	Cannabis
SAMPLE SIZE	135
SAMPLE TYPE	Students
AGE	Adults
SEX	81 Male; 64 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Appalachian State University, North Carolina
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Comrey Personality Scale; Cattell 16 Personality Factor Scales
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	10

PURPOSE

One of the basic questions in the investigation of drug abuse is the extent to which this type of behavior represents social rebellion and overlaps with other types of nonconformist or delinquent behavior. Researchers examined social conformity and rebellion characteristics, as measured by personality scales, among a college population.

METHODOLOGY

Subjects consisted of 135 undergraduates enrolled at Appalachian State University in North Carolina, screened to exclude individuals using drugs other than marihuana. Subjects were divided into three criterion groups: 41 male and 33 female nonusers, 20 male and 20 female occasional users reporting use of no more than four joints per week, and 20 male and 11 female heavy users. Participants completed the Comrey Personality Scale and the Cattell 16 Personality Factor Scales questionnaires. Correlations were computed between the test scales and the three levels of marihuana use for the validation sample. Mean scores were computed for the three criterion groups using the total samples, and the resulting profiles provided comparisons of the three groups on the CPS personality dimensions.

RESULTS

Of the 16 Personality Factor scales, superego strength, tendermindedness, and control correlated significantly with marihuana use. On the CPS, the social conformity scale was most highly correlated with marihuana use for both sexes. Cross-validation yielded a correlation of .56, indicating that in this population the most parsimonious and efficient prediction of marihuana use could be achieved using the Social Conformity Scale alone.

CONCLUSIONS

Drug behavior can be scaled on a continuum of no use, occasional use and heavy use, and members of these classes can be ordered on the CPS social conformity scale. Interview data suggested that the score patterns for marihuana users depicted individuals who were not actively rebelling against the society in which they had been reared, but had rejected its mores, values and goals, and had become involved in a subculture with different values.

Krug, Samuel E., and Henry, Thomas J. Personality, motivation, and adolescent drug use patterns. Journal of Counseling Psychology, 21(5):440-445, 1974.

DRUG	Multi-Drug
SAMPLE SIZE	563
SAMPLE TYPE	Students
AGE	Adolescents (Mean age 17.5)
SEX	300 Male; 263 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Mississippi; South Carolina
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Cattell 16 Personality Factors; Motivation Analysis Test
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	13

PURPOSE

Data pertaining to illegal drug use obtained from self-report questionnaires may not be entirely valid, even though anonymity of the subjects is guaranteed. Investigators obtained immunity from prosecution and disclosure under the Drug Abuse Prevention and Control Act of 1970 to encourage self-report candor, and to elicit more nearly valid data correlating personality factors and drug use patterns among the adolescent sample.

METHODOLOGY

The sample consisted of 285 freshmen at a junior college in southern Mississippi, and 278 seniors at a public high school in South Carolina, including 300 males and 263 females, with an average age of 17.5 years. Subjects completed a drug use questionnaire regarding recency and frequency of use of marihuana, barbiturates, inhalants, aerosols, and LSD. In addition, they took the Cattell 16 Personality Factor Questionnaire, and the Motivation Analysis Test measuring motivational level in ten behavioral areas, in which excess of Unintegrated over Integrated components is a measure of dynamic conflict. Variance analyses were performed upon the data for the sexes, separately and combined.

RESULTS

The most common reason given for drug use was curiosity, although 12.6% reported peer influence. Male subjects reported greater use of glue and aerosols, and experimentation beginning at age 14; female subjects tended to use amphetamines or multiple drugs, beginning at age 15.5. Although deviation from the norm was greater for females, drug use patterns were sufficiently similar to permit combining the sexes in most analyses. In contrast to the nonusers, the adolescent drug user tended to be more dominant, impulsive, morally expedient, socially uninhibited, unconventional and radical, but less skilled in analyzing the motives of others.

The Motivation Analysis Test indicated that users had lower dependency needs, some unchannelled hostility, greater conflict in developing satisfactory relationships with the opposite sex, greater self-indulgence and sexual gratification, and less exacting conscience development, with scores indicating conflict in this latter area. Users also tended to seek social approval and maintain the desired social image.

CONCLUSIONS

Findings suggest that drug users have a central core of low inhibition, possibly the psychological residue of parental indulgence, or a liberal, nondisciplinary upbringing. Rather than conclude that the adolescent culture values and rewards drug use, the researchers suggest that the culture rewards individualism and departure from traditional norms. The data indicate that drug users are not actively antisocial, but motivated to seek social approval, while in a state of uncertainty as to what is the morally correct course of action. Females appear to be higher risks than males for all problems related to drug abuse. The investigators point out the importance of these findings to strategies for drug counseling.

Ludenia, Krisat. "Personality Characteristics of Drug Abusers." Ph.D. Dissertation, University of Missouri, Columbia, 1972. Ann Arbor, Michigan: University Microfilms, No. 73-7056, 422 pp.

PURPOSE

Personality characteristics of drug abusers were studied to determine: (1) the extent to which deviate personality traits were characteristic of drug abusers; (2) the kinds of deviate personality traits found among drug abusers; and (3) whether the kinds of deviate personality traits characteristic of drug abusers were unique when compared to the kinds of deviate personality traits known to be characteristic of other sociologically and/or behaviorally defined groups such as delinquents, alcoholics, neurotics, and psychotics.

METHODOLOGY

The sample consisted of 759 drug abusers from 23 states; their age ranged from 15 to 54 years. They were drawn from the drug cult, college and university counseling agencies, drug abuse agencies, prisons, mental health hospitals, and rehabilitation agencies.

The subjects were administered or had already been administered the Minnesota Multiphasic Personality Inventory (MMPI). All MMPI profiles were sorted according to clinically abstracted MMPI profiles designed by the researcher based on previously established behaviorally and/or sociologically defined groups. A methodological cookbook schema established by Gilberstadt and Duker (1965) was also employed. This study was conducted between May and December 1971.

RESULTS

Eight-seven percent of all valid profiles were classified as deviate. The greatest percentage of male deviate profiles were of the psychotic, prepsychotic, schizoid, delinquent, and elevated scale 5 or scales 5 and 4 types. Females, on the other hand, had the greatest amount of deviate profiles classified as delinquent, schizoid, prepsychotic, and psychotic.

No new or unique MMPI profile type(s) were found among the drug abusers in the sample. Significant elevation on scale 5 or scales 5 and 4 was found among 14% of the male drug abusers while 39% of female drug abusers presented elevated scale 4-depressed scale 5 profiles. Severe psychopathology was also evidenced among 28% of the male and 23% of the female drug abusers.

Of sixty-three self-reported drug abusers who were not seeking psychological assistance, males and females admitted using marihuana or hashish on a regular basis. Seventeen males reported regular LSD usage. Although 16 females were admitted regular amphetamine and speed users, none reported using LSD on a regular basis.

Seventy-five percent of the males and 73% of the females among drug abuser volunteers felt less creative when on drugs than when off. Eighty-six percent of the males and 77% of the females would rather choose drugs than alcohol at a party. Seventy percent of the males and 73% of the females reported never having a flashback. Fifty-eight percent of the females felt their most productive days were when they were "straight" as did 51% of the males. Seventy-five percent of all volunteer subjects reported not feeling attitudinally and personally better when on drugs than when off drugs.

CONCLUSIONS

Deviate personality traits are characteristic of drug abusers, although overall, the chronic neurotic and paranoid MMPI profile types were least in evidence in both sexes.

McAree, C.P.; Steffenhagen, R.A.; and Zheutlin, L.S. Personality factors in college drug users. International Journal of Social Psychiatry, 5:102-106, 1969.

DRUG	Cannabis; Multi-Drug; Amphetamines
SAMPLE SIZE	76
SAMPLE TYPE	Students
AGE	Adults
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	University of Vermont, Vermont
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI
DATE(S) CONDUCTED	1967-1968
NO. OF REFERENCES	6

PURPOSE

Narcotics addicts and chronic alcoholics have been shown to exhibit abnormal personality profiles as measured by the Minnesota Multiphasic Personality Inventory. Investigators at the University of Vermont examined the MMPI profiles of student drug users to determine whether comparable abnormal personality factors exist in this population as well.

METHODOLOGY

The sample consisted of 58 male students who volunteered for the study, under a guarantee of anonymity and immunity from prosecution. All were periodic users of marihuana. Of these, 19 had used marihuana only; eight had also used other drugs such as amphetamines on occasion; one individual's drug use (other than marihuana) was unidentifiable; and 30 reported varied and extensive use of all types of drugs including psychedelics. Subjects completed a drug use questionnaire and the MMPI. A control group of 18 students provided the MMPI profiles for nonusers.

Scores of over 70 on the 10 scales of personality factors were deemed indicative of abnormality. Scores were compared between groups and with the controls, and the Mann-Whitney test of significance applied.

RESULTS

Among the controls, 16.7% produced two or more scores over 75, while 42.1% of the users of marihuana only, and 70% of the gross multiple users scored over 75 on at least two or more scales of the MMPI. Marihuana-only users differed from controls primarily on the masculinity-femininity scale. Gross multiple users consistently scored higher on the schizophrenia scale and five others: psychopathic deviation, hypomania, and social interest, as well as the Hy and F scales.

CONCLUSIONS

Those who only use marihuana are not easily differentiated from the controls on the basis of the MMPI personality characteristics. This group's difference from the controls of the Mf scale is not necessarily indicative of pathology, but may represent increased sensitivity and aesthetic appreciation. The multiple drug users, while not overt psychotics, appear schzoid personalities characterized by withdrawal, poor interpersonal relationships, and inability to express emotion, and may run a greater risk of severe emotional disorganization.

McAree, C.P.; Steffenhagen, R.A.; and Zheutlin, L.S. Personality factors and patterns of drug usage in college students. American Journal of Psychology, 128(7):890-893, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	200
SAMPLE TYPE	Students
AGE	Adults (18-64)
SEX	200 Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Burlington, Vermont
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	3

PURPOSE

Much of the data in connection with drug abuse are based on findings on hospitalized subjects or persons under duress. Previous data support the hypothesis that different patterns of drug usage are associated with different profiles on the Minnesota Multiphasic Personality Inventory: subjects reporting varied and extensive use of all types of drugs as well as psychedelics showed a higher incidence of abnormal MMPI profiles than did nonusers or individuals using marihuana alone. Under a grant of immunity from prosecution, investigators at the University of Vermont tested this hypothesis on college students.

METHODOLOGY

The experimental group consisted of 100 male users and 100 male controls without statistically significant differences in age, class year, or major. The drug users were categorized as falling into three patterns: 33 were users of marihuana only; 19 were multiple users of drugs excluding hallucinogens; 48 employed a wide variety of drugs including hallucinogens, and were characterized as gross-multiple users. The multiple users generally employed dextroamphetamine sulphate for exams, and then only occasionally. Participation in the study was voluntary, and a male sample was used since male subjects volunteered more readily for testing. Users knew that they were immune from prosecution on the basis of information confidentially provided. The users and controls were administered a battery of tests including a sociodemographic questionnaire and the MMPI. The criterion for abnormality was TOR TC scores of 75 on two or more scales on the MMPI. A Mann-Whitney U test of significance was used to compare the individual scales for the three groups of users with those of the controls. Limiting factors in this study were the small size of the sample and the fact that the researchers were only able to compare the gross-multiple users, the marihuana-only users, and the controls.

RESULTS

Of the 100 control subjects, 17% met the criterion for abnormality. Of the 33 subjects in the marihuana-only group, 18% scored over 75 on two or more scales of the MMPI. Of the 19 subjects in the multiple-use group, 53% had higher scores, and of the 48 persons in the gross multiple-use group, 52% met the criterion of abnormality on the MMPI. No significant difference between the marihuana-only group and the controls was indicated; however, the scores for the gross multiple-use group showed differences in all scales at a high level of significance. A composite profile of mean scores indicated that gross-multiple users had the highest Schizophrenia scale scores.

CONCLUSIONS

There are different patterns of drug use associated with different patterns of response on the MMPI. A sharp dichotomy exists between profiles of nonusers and users of marihuana, on the one hand, and multiple drug users on the other, suggesting that even occasional use of drugs other than marihuana places one in a different category, with likely associated psychopathology. The marihuana-only user has an intact personality and is grappling with a social problem. The multiple user indicates schizoid tendencies. These schizoid tendencies do not explain the motivation for drug use; the investigators suggest that the schizoid individual may use drugs as an esoteric pursuit replacing the lacking sense of identity. There is no evidence that multiple drug use itself causes schizoid changes in the personality, nor that drug use causes unequivocal enduring alterations in personality function in relation to drug effects.

McGuire, Judith S., and Megargee, Edwin I. Personality correlates of marijuana use among youthful offenders. Journal of Consulting and Clinical Psychology, 42(1):124-133, 1974.

DRUG	Cannabis
SAMPLE SIZE	96
SAMPLE TYPE	Incarcerated
AGE	Adults (18-28)
SEX	Male
ETHNICITY	20 Black; 76 White
GEOGRAPHICAL AREA	Tallahassee, Florida
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI; CPI; State-Trait Anxiety Inventory
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	27

PURPOSE

Earlier investigations conducted in military and institutional settings yielded a description of the marihuana user as a psychopathic personality characterized by hostility, authority problems, and impulsivity, a finding challenged by more recent research among college students. These later reports indicate that moderate marihuana smokers are more poised, sociable, flexible, creative, and aesthetically sensitive than nonusers. The data from both types of studies are limited by methodological factors: the division of subjects into two simple categories, users and nonusers; the reliance upon self-report in situations in which the criminal penalties for marihuana use discourage candor, and the unstructured, anecdotal format of psychiatric case reports. Research among college students has made use of objective quantitative measures including the California Psychological Inventory, the Minnesota Multiphasic Personality Inventory, the Taylor Manifest Anxiety Scale, and similar instruments of personality assessment. However, controlled studies on noncollegiate marihuana smokers are virtually nonexistent. A more rigorous investigation on a noncollege sample employing adequate controls and objective measuring instruments is the object of this study. It is to determine whether differences in the findings of researchers of the 1940's and those of the 1970's are due to cultural changes, particularly the use of marihuana by middle and upper class individuals, or are the result of more rigorous research methods.

METHODOLOGY

Researchers at Florida State University screened 1,400 inmates admitted consecutively between November 3, 1970 and November 2, 1972, to the Federal Correctional Institution, Tallahassee, Florida, a medium security facility for youthful male offenders ages 18-28. All inmates are administered the MMPI and the CPI upon admission, and these data were included for the 96 subjects of the present study. The subject group excluded addicts of any drug, and persons who had ever attended college, and were divided into four groups, each composed of 19 Whites and five Blacks.

The subjects were categorized as nonusers of any drugs other than alcohol, occasional users of marihuana only, regular users of marihuana only at least once per week, and heavy users reporting daily use of marihuana as well as other drugs.

Subjects took the State-Trait Anxiety Inventory as well as the MMPI and CPI; the MMPI Factor A, Factor R, Adjustment to Prison and Overcontrolled Hostility scales, the CPI Empathy scale, the CPI Social Maturity Index, the Revised Beta IQ, highest grade completed, and instant offense were incorporated into the data analysis. It was hypothesized that those scales previously found to differentiate students varying in their use of marihuana and other drugs would also be found to discriminate among the groups of youthful offenders. One-way analyses of variance, and Duncan's multiple-range test were applied to establish statistical significance.

RESULTS

One-way analyses of variance showed that of the seven MMPI scales found to differentiate between levels of marihuana use in previous research, three were also significant in the present sample. Apparently there is more similarity between users and nonusers in a prison setting than in a college since fewer measures significantly differentiated the groups. The only other MMPI scale that approached statistical significance was that of overcontrolled hostility. For the CPI, Socialization and Empathy attained levels of statistical significance, as did Well-Being, Self-Control, Tolerance, Good Impression, Intellectual Efficiency, and Psychological-Mindedness. On the Socialization Scale, regular users were significantly higher than the other three groups, whereas on the Empathy scale, heavy users were significantly higher than the nonusers. Nonusers displayed a mean IQ significantly lower than the means of the other three groups. Fifteen of the regular users and nine of the heavy users were incarcerated for drug-related offenses, as opposed to only one of the nonusers and two of the occasional users.

CONCLUSIONS

There was considerable similarity in the personality profiles of the nonusers and occasional users. The regular and heavy users diverged markedly, with regular users manifesting the best overall adjustment and heavy users the poorest. The nonusers indicated a tendency towards rigid, authoritarian attitudes and conventional, conservative thought patterns. The profiles of the occasional users were similar to those of the nonusers, with somewhat more tendency toward impulsive asocial acting out. Of the four groups tested, the heavy and regular users differed the most. The heavy users were clearly the most maladjusted sample in the present study, characterized by strong sociopathic tendencies including serious alienation from authority figures in general and their families in particular. The test profiles suggest egocentric values emphasizing hedonism with little concern for others, and, despite superficial charm, a pattern of shallow and exploitive interpersonal relationships, a finding also of earlier studies of college students. The regular users emerged as the best adjusted sample in the present investigation, with the least deviant values. Regular users were less manipulative, hostile and impulsive than the other groups. The fact that 60% of the regular user sample were imprisoned for drug-related offenses suggests that, aside from their decision to use marihuana, many of the regular users were relatively law-abiding, and were simply behaving in accordance with a value system that accepted marihuana use. These comparisons suggest that the socialization and overall adjustment of the regular users in the Federal Correctional Institution are not very different from similar samples in college settings. It is clear that the psychopathology observed in the early military studies is no longer invariably associated with marihuana use; however, there appears to be a reliable association between heavy usage of marihuana, in conjunction with other drugs, and personality test scores indicative of maladjustment among prisoners and college students alike.

McLaughlin, James Francis. "Selected Personality Characteristics of the Moderate Marijuana, Heavy Marijuana, and Poly-drug-using Marijuana Smoker." Ph.D. Dissertation, University of Montana, 1973. Ann Arbor, Michigan: University Microfilms, No. 74-1390, 144 pp.

PURPOSE

This study sought to determine personality characteristic differences among marihuana nonsmokers, moderate marihuana smokers, heavy marihuana smokers, and polydrug using marihuana smokers.

METHODOLOGY

Twenty-five percent of the undergraduate college population of a small western university were sampled through randomly selected undergraduate course offerings. The California Psychological Inventory, Guilford-Zimmerman Temperament Scale, and the Sixteen Personality Factor Questionnaire were used. The prevalence of marihuana smoking behavior of the undergraduate students was ascertained through the completion of a numerically encoded anonymous survey questionnaire, to provide the necessary data to categorize and select the four groups (marihuana nonsmokers group, moderate marihuana smokers group, heavy marihuana smokers group, and polydrug using marihuana smokers group). Thirty-four individuals were selected for each group for personality inventory completion by matching their age, sex, and educational level.

All personality inventory results were subjected to a one-way analysis of variance. For all significant personality variables, the Scheffe's post-hoc multiple mean comparisons method was used to determine where the significant differences among the groups were located. The survey questionnaire data were converted to percentages and reported in tabular form in the appendices.

RESULTS

Of the 2,070 students surveyed, 62.5% had smoked marihuana at least once. However, at the time of questionnaire completion, 39.3% of the surveyed students were actively engaged in marihuana smoking behavior.

Personality inventory results for the four tested groups indicated significant differences between the marihuana nonsmoker and the marihuana smoker groups on the communality, sociability, socialization, and capacity for status scales on the California Psychological Inventory and on the tough-minded versus tender-minded factor on the Sixteen Personality Factor Questionnaire.

CONCLUSIONS

Both the heavy marihuana smoker group and the polydrug using marihuana smoker group lacked somewhat in social skills. This suggests for these groups somewhat of an asocial personality orientation in comparison to the marihuana nonsmoker group.

Mellinger, Glen D.; Somers, Robert H.; and Manheimer, Dean I. Drug use research items pertaining to personality and interpersonal relations. A working paper for research investigators. In: Lettieri, Dan J. Predicting Adolescent Drug Abuse. A Review of Issues, Methods and Correlates. NIDA Research Issues Series, vol. 11. Washington, D.C.: Government Printing Office, December 1975. pp. 301-342. [Stock No. 1724-00496]

DRUG	Multi-Drug
SAMPLE SIZE	960
SAMPLE TYPE	Students
AGE	Adults
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Berkeley, California
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	Fall, 1970 and Spring, 1973
NO. OF REFERENCES	4

PURPOSE

In a longitudinal survey, investigators at the University of California studied personality and interpersonal variables as possible consequences, concomitants, and precursors of drug use. Two popular hypotheses were explored: (1) that drug use is associated with psychopathology, and (2) that drug users may tend to have personality traits which, if channeled constructively, could reflect high levels of personal development and future potential. Changes in drug use patterns were also investigated, with emphasis placed upon general lifestyles rather than personal psychopathology, in a community highly tolerant of drug use.

METHODOLOGY

The sample consisted of 960 males who responded to a questionnaire upon enrollment at the University of California in the fall of 1970, and again in the spring of 1973, if they could be located. Of the original sample, 834 or 87% of the respondents to the first questionnaire completed the second survey. Subjects were classified as nonusers, users of marihuana only, and multiple drug users at both testing times, to permit evaluation of changing patterns of drug use. The test instrument employed a variety of items generally related to lifestyle, among which were included questions pertaining to drug use. Items identified personality factors such as general neuroticism, ego integration/psychological well-being, ego integration/amotivational syndrome, athletic/energetic/competitive components, tolerance versus inflexibility/hostility, creativity/autonomy, outgoing/expressive versus isolated/withdrawn, "live for now"/ alienation, introspectiveness/goal orientation, and identification with significant reference groups; interpersonal items included satisfaction with relationships with women, expressiveness, anxiety, hostility, relationship with the father, and friends.

RESULTS

Drug users differed little from those who had never used drugs at any time, in terms of the amotivational syndrome, although polydrug users tended to give less thought than other subjects to career goals. The groups did not differ significantly as to grades. Men who had never used drugs were more likely to report not dating, or to express self-doubts in relationships with women. Drug use correlated with living with a girlfriend, but also with acceptance of moral values condoning sexual exploitation, a factor not conducive to personal intimacy. Drug users were no more likely than nonusers to express dissatisfaction with their lives. Among those individuals making the transition from nonuse to use of marihuana only, or from use of marihuana to use of other drugs, a pattern of restlessness and discontent emerged, in contrast to individuals whose drug use or nonuse pattern remained stable or declined. Polydrug or frequent marihuana use indicated a deeper level of involvement in the drug use subculture, as measured by the number of friends using drugs, and the inclination to identify with drug users as a significant reference group.

CONCLUSIONS

Findings of this study tend to support both the emotional distress and the openness and creativity hypotheses of drug use. The investigators suggest that these hypotheses are not necessarily contradictory; emotional distress may signify reflective personal processes ultimately leading to a more substantial personal development rather than a denial or fear of distressing, conflicting experiences. Anxiety and depression are less highly related to drug use than are items suggesting ego integration problems, identity crisis, or the amotivational syndrome. These factors may in turn reflect acceptance of subcultural values endorsing introspection rather than career achievement.

Naditch, Murray P. Ego mechanisms and marihuana usage. In: Lettieri, Dan J., ed. Predicting Adolescent Drug Abuse. A Review of Issues, Methods and Correlates. NIDA Research Issues Series, vol. II. Washington, D.C.: Government Printing Office, December 1975. pp. 207-222. [Stock No. 1724-00496]

DRUG	Cannabis
SAMPLE SIZE	483
SAMPLE TYPE	Students
AGE	Adults (mean age 21.4)
SEX	Male
ETHNICITY	95% White
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI; Rotter's I-E Scale; Cantril's Self-Anchoring Striving Scale; CPI
DATE(S) CONDUCTED	Spring & Summer of 1972
NO. OF REFERENCES	53

PURPOSE

Personality patterns among marihuana users were analyzed to determine what types of ego mechanisms characterize these individuals, as compared with alcohol users and narcotic drug addicts.

METHODOLOGY

The sample for this investigation, part of a larger study, consisted of 483 male subjects interested in drug use who had been contacted through chain referrals. The mean age of all subjects was 21.4 years. Most lived in a university community, 65% were students, and 95% were White. For purposes of this study, data on marihuana and hashish use were combined, and the dependent variable measure consisted of the number of times subjects had used either drug. Subjects completed the MMPI, the CPI, and Cantril's Self-Anchoring Striving Scale, measuring the disjuncture between a subject's real and ideal life situations along a 10-point scale. Locus of control was measured using Rotter's I-E Scale. Correlations and regression equations were examined using the total sample, and subsamples of nonusers and marihuana-only users. Pearson correlations were computed for each of the ego mechanisms with marihuana use, and between marihuana use and five measures of discontent and maladaptive behavior. Discriminant function analysis was also performed.

RESULTS

Marihuana use correlated positively with defensive regression, and negatively with total coping. The strongest zero-order correlation was a positive one between marihuana use and regression in the service of the ego. Hard drug users shared this trait, but were more likely to have poorer total coping and a greater tendency to use defensive regression. A negative relationship between

marihuana use and paranoia, but a positive correlation between this drug and a high score on the MMPI schizophrenia scale appeared; however, schizophrenia, locus of control, maladjustment, and discontent were not significantly related to use of marihuana only. Poor coping and characteristic use of defensive regression, although not significant predictors of marihuana use, were predictors of those characteristics differentiating marihuana users from users of more potent drugs. Regression in the service of the ego was the strongest predictor of all variables considered.

CONCLUSIONS

Findings of this study indicate that marihuana users do not share the configuration of ego mechanisms of defense and coping which have been associated with alcohol and narcotics addiction. Marihuana use was not associated with inadequacy, discontentedness, or maladaptive behavior, or other forms of psychopathology. Users of marihuana-only tend to exhibit regression in the service of the ego, a characteristic usually associated with creativity and psychological health. However, users of more potent illicit drugs do exhibit evidence of ego deficiencies, as do subjects deemed most likely to experiment with these other drugs. Marihuana use, if an expression of openness and creativity, may be subject to change over time, suggesting that the time period of data collection, as well as general personality traits of the sample population, should be taken into consideration in future research.

Naditch, Murray P. Ego functioning and acute adverse reactions to psychoactive drugs. Journal of Personality, 43(2):305-320, June 1975.

DRUG	Cannabis; Hallucinogens
SAMPLE SIZE	483
SAMPLE TYPE	Students; Other
AGE	Adults (average age 21.4 years)
SEX	483 Male
ETHNICITY	449 White; 34 Other
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	1972
NO. OF REFERENCES	15

PURPOSE

Earlier studies indicate that psychoactive drugs disrupt and alter the normal ego defense and coping mechanisms, and that pre-existing defense and coping patterns are major determinants of perceived effects of LSD. Users who characteristically employ denial would be less likely to experience acute adverse reactions because of their capacity to block out experience, while those who use projection, regression, or repression might be expected to have distressingly paranoid or anxious reactions; individuals with a capacity for regression in the service of the ego, and a higher tolerance of ambiguity, would probably tend to have feelings of elation in response to LSD, and a lower incidence of acute adverse reactions. Investigators in a college community tested these hypotheses relating ego functioning to responses to both marihuana and LSD.

METHODOLOGY

The data were collected using a self-administered questionnaire filled out by 483 drug users contacted through a system of chain referrals. The mean age of the sample was 21.4 years; 95% were White, and 65% were students. Approximately 92% had used marihuana, 55% more than 100 times. Fifty-two percent had used LSD and 55% mescaline. Acute adverse reactions were measured using a 23-item index of retrospective experiences, including recurring terrible thoughts or feelings, fear of loss of control, fear of permanent insanity or impending death, despair, suicidal thoughts, and strong negative affect. Adverse responses to marihuana and LSD, the latter including mescaline, were measured separately. Ego mechanisms were calculated using the Haan measures derived from the MMPI and the CPI. The variables analyzed included: acute adverse reactions to marihuana, acute adverse reactions to LSD, quantified marihuana usage, quantified LSD usage, intellectualization, denial repression, projection, regression, regression in the service of the ego, tolerance of ambiguity, and total coping.

RESULTS

With the exception of repression and projection, each of the ego mechanisms hypothesized to be related to acute adverse reactions to marihuana correlated significantly in the predicted directions; those predicted to correlate with adverse reactions to LSD did so, with the exceptions of projection and regression in the service of the ego. Subjects high in regression were most likely to have had acute adverse reactions to both drugs. Subjects using denial as a characteristic defense mechanism were less likely to have had acute adverse reactions to either drug, as were those high in intellectualization.

CONCLUSIONS

Defensive regression was the most clearly maladaptive ego mechanism related to acute adverse reactions, possibly because subjects employing regression are less likely to have secondary defenses to fall back on, a situation conducive to acute anxiety. While regressers and repressers are more likely to be overwhelmed by the drug experience because of greater willingness to submit themselves to it, intellectualizers and deniers, in removing themselves from the experience, are less likely to develop adverse reactions. These findings are consistent with other studies reporting LSD, but not marihuana usage, to be associated with less adaptive and more pathological functioning. The conceptual scheme of this study lends itself to the development of a more complex model which should include the effects of motive, set, and situational influence. This research is currently in progress.

Obitz, Frederick W.; Oziel, L. Jerome; and Unmacht, John J. General and specific perceived locus of control in delinquent drug users. The International Journal of the Addictions, 8(4):723-727, 1973.

DRUG	Multi-Drug
SAMPLE SIZE	80
SAMPLE TYPE	Incarcerated; Volunteer
AGE	Adolescents (Mean age 15.2 years)
SEX	44 Male; 36 Female
ETHNICITY	4 Amerindian; 2 Black; 20 Cross-Cultural; 14 Mexican-American; 40 White
GEOGRAPHICAL AREA	Phoenix, Arizona
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Rotter's I-E Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	7

PURPOSE

Earlier studies indicate that individuals labeled internal on the Rotter I-E scale become resistant, negativistic and nonconforming when aware of manipulative attempts to control their behavior, whereas external individuals do not. Contrary to expectations, alcoholics are generally internal individuals who perceive themselves in control of their own behavior in general, and their drinking in particular. In an attempt to determine whether delinquent drug users, who frequently act out in negative ways, are similar to alcoholics, investigators studied adolescent drug use in a detention facility in Phoenix, Arizona.

METHODOLOGY

The sample consisted of 44 males ranging in age from 13 to 18, and 36 females ages 12 to 17, with a mean age of 15.2 years. These volunteers within the detention facility included 40 Caucasians, 14 Mexican-Americans, 2 Blacks, 4 Indians, and 20 subjects of mixed racial background. All were awaiting adjudication for offenses ranging from running away from home to felonies; all reported use of alcohol, amphetamines, hashish, heroin, LSD, or marihuana more than once within the prior 12 months. In addition to a drug use questionnaire, subjects responded to the I-E scale, as well as a scale specifically designed to measure perceived locus of control of drug-taking behavior.

RESULTS

The mean I-E score for the sample was 14.0, with a range of 8 to 23 and a standard deviation of 2.8, indicating placement in the 93rd percentile in terms of externality. However, subjects did not endorse either external or internal items more frequently on the scale measuring locus of drug-taking control, nor did the results of this second test correlate significantly with the I-E scores.

CONCLUSIONS

The findings did not support the hypothesis that drug use parallels that of alcohol. Subjects indicated that they perceived themselves as having little control over their behavior in general, but some control over their drug use. Alcoholics and drug users appear to have dissimilar beliefs about their respective roles in bringing about whatever difficulties they encounter, and could be expected to respond in dissimilar ways to comparable situations. Future studies may elucidate the relationship between I-E scores and drug usage, using more homogeneous samples of individuals addicted to specific drugs.

Pittel, Stephen M. Psychological aspects of heroin and other drug dependence. Journal of Psychedelic Drugs, 4(1):40-45, Fall 1971.

DRUG	Hallucinogens and Opiates
SAMPLE SIZE	235
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults
SEX	Both Male and Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	11

PURPOSE

Earlier studies indicated that the original Haight-Ashbury "hippie" and the area's more heavily committed users of psychedelic drugs were quite similar in personality organization. Both groups manifested the same type of character pathology seen among ambulatory amphetamine users and psychedelic users who required inpatient psychiatric care. Extending these comparions to include heroin addicts, MMPI group profiles were obtained from a sample of Haight-Ashbury drug using volunteer subjects from the Haight-Ashbury Research Project.

METHODOLOGY

The author compared MMPI group profiles obtained from 37 male and 27 female heroin addicts seen at the Haight-Ashbury Free Medical Clinic Detoxification Unit with those of 100 males and 73 females who served as volunteer subjects for the Haight-Ashbury Research Project. The latter subjects were classified as psychedelic drug users on the basis of their primary drug choice. The Detoxification sample included patients classified as New Junkies, Transitional Junkies, and Old Style Junkies on the basis of the date of their initial involvement with heroin.

RESULTS

There was a higher overall elevation of the addict profile which might have suggested a greater degree of psychopathology for this group, but the bimodal profile configuration indicative of character pathology was common to both the addict and psychedelic groups.

Despite significant differences between groups on some MMPI scales, the overall similarity of profile configurations suggested that heroin addicts who seek treatment closely resemble psychedelic drug users who seek treatment.

CONCLUSIONS

Some studies emphasize similarities among users of different drugs; others emphasize the differences among these users, demonstrating unique personality constellations and/or social factors associated with the use of each. The two findings have been contrasted in recent drug literature. However, the arguments have done little to resolve the question.

Drug dependence is most likely to occur among individuals who lack the psychological resources needed to deal adequately with inner conflicts and/or environmental frustrations. Some individuals appear to become drug dependent in spite of having previously achieved a reasonable degree of personality organization, or when they are subjected to unusually severe situational stress, chronic pain, or anxiety.

Attention should be focused on the processes of personality rather than on fixed trait structure when studying drug users. Therapy for drug users should be geared to their need for structure and stability, and to the gradual building of ego functions.

Richek, Herbert G.; Angle, Jimmy F.; McAdams, W.S.; and D'Angelo, James. Personality/mental health correlates of drug use by high school students. The Journal of Nervous and Mental Disease, 160(6):435-442, June 1975.

DRUG	Multi-Drug
SAMPLE SIZE	190
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	110 Male; 80 Female
ETHNICITY	180 White; 6 Amerindian; 1 Mexican-American; 3 Other
GEOGRAPHICAL AREA	Norman, Oklahoma
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Bown Self-Report Inventory
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	11

PURPOSE

Researchers at the University of Oklahoma School of Social work tested the hypothesis that personality and mental health differences exist between high school age users and nonusers of drugs other than marihuana.

METHODOLOGY

Subjects were 190 middle class male and female juniors and seniors enrolled in psychology classes at a large urban southwestern high school. All 80 female subjects were White, while the 110 males included six Indians, one Chicano, and three "others." Fifty-four percent of the female students and 42% of the males described themselves as religious. Personality and mental health correlates were measured by the Bown Self-Report Inventory, an instrument based upon Rogerian theories, yielding a configuration known as the phenomenal self, consisting of 48 items representing attitudes towards the Self, Others, Children, Authority, Work, Reality, Parents, and Hope. Subjects responded to each item by indicating on a five-point scale, ranging from "very much like me" to "very much unlike me," the extent to which the item expressed their own feelings and attitudes. Drugs surveyed included amphetamines, barbiturates, marihuana, peyote, inhalants, and opiates. The data were analyzed, with Pearson product-moment correlations and single classification analysis.

RESULTS

A positive relationship appeared among male subjects between the Reality variable of the Self Report Inventory and the use of peyote and opiates. Other relationships for males were negative. Among females, use of amphetamines correlated inversely with the SRI variables, Children, and the total score; peyote with Parents, Hope, and the total; barbiturates with Others, Children, and Hope; inhalants with Children and Parents; and marihuana with Children and Parents.

Males were classified as polyusers, nonusers, and users of marihuana only; females as nonusers, polyusers, and users of one substance only. There were no statistically significant differences between the three categories of females. However, for males, significant differences existed in five areas: Self, Authority, Work, Hope, and the total score. Male polyusers and users of marihuana were similar on the SRI variable, Work, with users of marihuana holding more positive attitudes towards work than polyusers. For the other variables, no differences existed between nonusers and users of marihana only.

CONCLUSIONS

Marihuana usage seems not to be related to personality or mental health deficits in high school students, particularly males, a finding corroborated by similar studies of college students. For the other drugs, conclusions are equivocal, although the data suggest that amphetamine usage may indicate some psychopathology in high school students. Further research is warranted to determine whether amphetamine use among high school students is related to specific psychiatric disease entities, such as depression.

Riggs, Elaine E. Students and drug use: A study of personality characteristics and extent of drug using behavior. Conseiller Canadien, 7(1):9-15, January 1973.

DRUG	Multi-Drug
SAMPLE SIZE	60
SAMPLE TYPE	Students
AGE	Adults (approximately 19 years of age)
SEX	30 Male; 30 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Edmonton, Alberta, Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Edwards Personal Preference Schedule
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	18

PURPOSE

This research was designed to examine the relationship, if any, between selected personality and attitudinal variables, and comparative extent of drug using behavior among a sample of 60 twelfth grade students.

METHODOLOGY

The study was limited to an examination of differences on selected personality variables among three groups--habitual users, occasional users and nonusers of psychedelic drugs. Psychedelic drugs included organic substances (e.g., marihuana), chemicals and compounds (e.g., LSD, "speed" and glue), and prescribed drugs (e.g., amphetamines and barbiturates). Rigorous control of variables other than age and grade level--such as socioeconomic status, family dynamics, or ability levels--was not attempted; however, great differences were not found to exist on cursory examination of such variables.

The Edwards Personal Preference Schedule, which provides measures on 15 personality variables, was used to measure a number of relevant personality traits. In addition, a Survey of the Opinions of Youth was designed for the purpose of examining the direction and intensity of attitude toward drug usage, and employed with the intention of measuring a limited number of important potential correlates of the attitudinal dimension of personality. All subjects were interviewed prior to testing, informed of the nature of the study and assured of anonymity.

Data were treated by using the trial or null hypothesis to determine the existence of differences on possible sources of variation; thus, it was hypothesized that no significant differences would be found to exist among groups of habitual drug users, occasional drug users and nondrug users, or between males and females within each group, nor would a significant interaction be found between extent of drug usage and sex.

RESULTS

With one exception, the null hypothesis was confirmed. The single exception was found with regard to the variable Endurance which distinguished between the group of habitual drug users and the others; as a group, habitual drug using students displayed a significant lack of qualities pertaining to Endurance, exhibiting inability to concentrate, academic failure, lack of motivation and growing apathy toward present tasks and future plans. Apart from this finding, extent of drug usage was found not to be associated significantly with distinctive or characteristic personality constructs as measured by the Edwards Personal Preference Schedule. Thus habitual, occasional and nonusers were found to be, on the average, similar to one another in respect to 14 EPPS personality variables. On all 15 personality variables, occasional users and nonusers were not significantly different.

CONCLUSIONS

The results of this research imply a need for diminished focus upon the existence of various states of deviance, or otherwise abnormal constructs of personality, presumed to characterize drug users in our youth population. The exploration of relevant dimensions of personality, particularly the attitudinal dimension, may prove to be a viable approach to the study of characteristics of youth as they relate to extent of involvement with drug usage.

Robinson, Lisa. "Marijuana Use in High School Girls: A Psycho-Social Case Study." Ph.D. Dissertation, University of Maryland, 1970. Ann Arbor, Michigan: University Microfilms, No. 70-23,314. 142 pp.

PURPOSE

Psychological traits, attitudes, and social characteristics were investigated in 17 high school girls between the ages of 15 and 18 years, who smoked marihuana. It was expected that the factors investigated would help to delineate a basis for identifying motivation for marihuana smoking in this group of girls. It was questioned whether the girls began to smoke because of inner pressures as implied by Erikson and Freud, or whether they did so because of social influences as depicted by Winick, Simmons, and Winograd.

The study was essentially a sociological case study which did not purport to generalize to the whole high school population. In a review of the literature, it was found that drugs were used to offer solace to some adolescents in their seemingly unending struggles for identity and a sense of accomplishment. Marihuana was the most popular drug because it was cheap, available, and the least harmful.

METHODOLOGY

Thirty-four girls from a city and a country high school were selected as the sample. Seventeen of the girls smoked marihuana and 17 did not. Both groups agreed to take part in the study, knowing their identities would remain anonymous. The Eysenck Personality Inventory, the Junior-Senior High School Personality Questionnaire, a Test for Alienation (after Blum et al. 1969) and a semantic differential were administered to the students. In addition, each girl was interviewed to attain information for a demographic, social and psychological profile.

RESULTS

The smokers were warm-hearted, enthusiastic, extroverts who were socially group dependent. They communicated with large, colorful vocabularies and expressed themselves in the jargon of the day. The nonsmokers were like the smokers in external appearance; however they were introverted and self reliant and more reserved, slow, and conscientious. Both groups were found to be quite neurotic. The childhoods of the smokers were reported to be grossly unsatisfactory though the nonsmokers claimed general satisfaction.

The smokers were girls who moved into peer group relations to find the satisfaction lacking in their primary groups (families) and to find security as they coped with their identity crises. Values of the peer groups were demonstrated by such activities as struggle against authority, repudiation of the "Establishment" values and the use of marihuana. While psychological bases of motivation such as neuroticism, insecurity, early childhood disruptions, and hostility were shown by the smokers, it was also seen that many of their behaviors stemmed from the group ethos.

CONCLUSIONS

Psychological traits, attitudes, and social characteristics of the smoker were pertinent in the question of motivation for the drug's use. There were both psychological and social behaviors that influenced the girls in their movement toward the group which utilized the smoking of marihuana as a social process. The peer group permitted the girls to find security within a group which boasted special identity.

Rosenberg, Chaim M. Young drug addicts: Background and personality. The Journal of Nervous and Mental Disease, 148(1):65-73, 1969.

DRUG	Multi-Drug
SAMPLE SIZE	50
SAMPLE TYPE	Drug Addicts
AGE	Adolescents and Adults (Mean Age 20.4)
SEX	35 Male; 15 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Sydney, Australia
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Eysenck Personality Inventory; IPAT Anxiety Scale; Raven's Progressive Matrices; School Records
DATE(S) CONDUCTED	February through October 1967
NO. OF REFERENCES	22

PURPOSE

To learn about the background and personality of young drug abusers, and to determine any causal factors for the use of drugs, data were obtained from 50 drug addicts under the age of 31 in Sydney, Australia.

METHODOLOGY

A drug addict was defined as a person who, as a result of repeated administration, had become dependent on the effects of a drug, had an overpowering desire to continue taking the drug and showed a marked tendency to increase the dose. The 50 subjects selected (35 male and 15 female) were currently under treatment at various medical centers. Only those subjects fitting the author's definition of drug addict were included in the sample. All subjects were 30 years of age or under, with the mean age being 20.4. Information was obtained by means of interviews, psychological tests (Eysenck Personality Inventory, IPAT Anxiety Scale, Raven's Progressive Matrices), and school records.

RESULTS

The patients were divided into two broad categories: (1) those adolescents who associated with other drug takers, who identified themselves as "hippies," and who used various drugs (e.g., amphetamines, LSD, marihuana) for their euphoric effects; and (2) those older, solitary drug takers who were dependent on barbiturates, and whose dependence developed gradually over the years.

Only 24% of the drug addicts' fathers, and 18% of the mothers, continued their education beyond the age of 14. Seventy-six percent of the fathers were unskilled, semiskilled or skilled workers.

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Seventeen of the fathers and four of the mothers were heavy drinkers or alcoholics, and there was a history of mental illness in 18 of the 50 families.

Only 50% of the subjects had attained the age of 15 with both their natural parents living at home. In 38% of the families there was a history of divorce, separation, or desertion.

Nearly 50% (23) of the subjects stated that their mothers were kind but poor disciplinarians, and 23 of the subjects stated that their fathers were disinterested or rejective. In addition, 25 of the subjects said they had been unhappy during their childhoods.

Prior to taking drugs, a little over half of the subjects had a moderate degree of personality disorder characterized by abnormal dependency, withdrawal or hostility in their relationship with others. Twelve subjects were classified as psychopaths. Most of the subjects complained of difficulties in their relationships with others, including shyness, inadequacy, anxiety and feelings of hostility. The psychometric testing revealed the subjects to be passive, immature, and "less masculine." Many subjects' interests lay mainly in the arts, and many of them considered themselves literary-oriented. The mean results of the psychometric testing were as follows:

TEST	YOUNG ADDICTS	NORMS
E.P.I. Form A:		
Neuroticism	15.0	9.1
Extraversion	12.2	12.1
	(N=49)	(N=2000)
IPAT Anxiety Scale	44.6	27.1
	(N=48)	(N=935)
Raven's Progressive Matrices (raw score)	42.6	43.3
	(N=40)	(N=888)

The mean neuroticism scores for the addicts were above the norm, but the extraversion scores did not differ significantly between the two groups. The IPAT shows the addicts had a high anxiety level, and Raven's Progressive Matrices test indicates that the subjects were of average intelligence.

CONCLUSIONS

Serious abuse of drugs mainly occurred among young people from deprived backgrounds who had poorly integrated personalities characterized by immaturity, passivity, and difficulty in handling anxiety. Domestic instability and lack of parental control could account for the personality weaknesses of the subjects. Also because of their homosexuality, passivity and artistic interests, the subjects felt alienated from society and formed their own drug-taking subculture where they gained a sense of belonging and relief from their feelings of anxiety.

Sadava, Stanley William. "College Student Drug Use: A Social Psychological Study." Ph.D. Dissertation, University of Colorado, 1970. Ann Arbor, Michigan: University Microfilms, No. 70-23,749. 200 pp.

PURPOSE

The study empirically tested Rotter's social learning theory to account for the selection of a specific deviant behavior, and developed a methodology for the study of college student drug use as a specific deviant behavior. Hypotheses were formulated and tested concerning relationships between three classes of predictor variables and both drug using behavior among users and self-reported potential for drug use among nonusers. One pair of hypotheses linked low expectancies for valued goal attainment, by conventional means, to drug using behavior and behavior potential, as an instance of instigation to deviance resulting from experienced failure in conformity. A second pair of hypotheses linked drug using behavior to the positive meanings or functions attached to such behavior, and behavior potential for drug use among nonusers to the negative functions or meanings of drug use. A third set of hypotheses linked social support for drug use to drug using behavior among users, and to behavior potential for use among nonusers. Further hypotheses linked social support to both expectancies and values, and to positive and negative functions of drug use. Finally, the personality variables, expectancies and reinforcement values, were linked to positive and negative functions of drug use.

METHODOLOGY

A sample of 199 female and 159 male students of the University of Colorado, Boulder campus, served as subjects. All were students in psychology courses and were drawn from each of the four years of college; mean age was 20.7 for females and 20.9 for males.

Expectations and reinforcement values were assessed for three relevant need areas derived from Rotter's general needs concepts: (1) academic achievement recognition, (2) peer-related social love and affection, and (3) independence. A procedure was used which required the subject to indicate, on a linear rating scale, the magnitude of his expectations for attaining a goal in that area and the magnitude of his personal value for that goal. It was hypothesized that low scores in the three need areas would be predictive of the instigation of deviant alternatives among college students, e.g., the use of psychedelics or marihuana. Measures were also developed for drug using behavior, stage of use, behavior potential for use, positive and negative functions of use, and social support for use.

The data were obtained from a group-administered questionnaire; each subject completed the questionnaire in a single testing session. Data analyses yielded scale scores, scale characteristics, Pearson correlation matrices and t-test analyses.

RESULTS

The results provided considerable support for the social learning theory. Two hundred-thirty students reported the use of an illicit drug. In the areas of academic recognition and social love and affection, low expectancies tended to be related to drug use. The extent to which users took drugs, and the stage of use, were related to the number of relevant personal meanings of drug use, as reflected in positive functions scores. A high behavior potential for use among nonusers was related to a low negative functions score. High social support was predictive of heavy use of drugs, an advanced stage of use, high behavior potential for use among nonusers, and high positive functions scores for use. No consistent relationships between personality variables and functions were found.

CONCLUSIONS

The present research represents an advance in the study of drug using behavior, and the variables associated with it. In particular, the measures of stages and of social support provide operational translations of concepts recognized as crucial in earlier studies, and provide a means toward the inferential study of drug use as a socially learned phenomenon. The personal meanings or functions of use and of abstinence have been operationalized with limited success; however, these operations represent bases for further empirical development.

College drug use presents a unique conceptual problem; the behavior cannot be conceived of as normative, since it constitutes a departure from norms sufficient to elicit social control responses. But the specific norm is disputed, with advocacy for normative change extending far beyond the drug subculture. Research is needed to determine whether these users tend to depart from other norms, or whether this deviance is restricted to the specific norm in question, as well as to establish the generality of drug use on campus. If the use of drugs is not restricted to a minority subculture but involves the student body as a whole, then the phenomenon becomes one of genuine conforming behavior within the peer cultural environment.

The most basic need in further research is for longitudinal study in order to validate measures and to establish the direction of causal inferences. Also, important sex differences merit further investigation.

Sadava, Stanley William. Initiation to cannabis use: A longitudinal social psychological study of college freshmen. Canadian Journal of Behavioral Science, 5(4):371-385, 1973.

DRUG	Cannabis
SAMPLE SIZE	319
SAMPLE TYPE	Students
AGE	Adolescents (Average age 17.6 years)
SEX	149 Male; 170 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Province of Quebec, Canada
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	30

PURPOSE

Investigators at Brock University, Quebec Province, tested the social learning theory of initiation to marihuana use in three hypotheses: (1) nonusers who subsequently begin to smoke marihuana will have personal and environmental variable scores before initiation which resemble those of users: lower expectations for academic recognition and social love and approval, higher expectations for independence, a more internal locus of control orientation, greater attitudinal tolerance of use, higher positive functions and lower negative functions of use, and greater social support for use; (2) after initiation, these scores can be expected to change in the established directions; (3) personality and social environmental variables together should produce a gain in prediction over univariate personality or social analysis taken separately, indicating the viability of this model as a field theory.

METHODOLOGY

The subjects consisted of 170 female and 149 male freshmen enrolled at an English-language denominational college in the province of Quebec. Of these 319 subjects, 110 had used marihuana before college and were termed the user group; 168 had not used marihuana by the end of the freshman year and were classified as nonusers; while 41 initiates began use during the freshman year. The median age for all three groups was 17.6 years. During freshman orientation, and again prior to final exams the following March, subjects responded to a 30-item questionnaire consisting of eight 10-point linear subscales designed to measure expectations of academic recognition, social love and approval; independence; internal-external locus of control orientation: positive and negative functions of drug use; social support for drug use; and tolerance of drug use. Autumn and Spring scores were compared for each group, and a two-tailed t-test performed, along with other univariate and multivariate analyses.

RESULTS

As measured on all eight scales, initiates scored intermediately between users and nonusers, and resembled the users in personality and social variables, both in the Autumn and Spring measurements; in the Spring, the differences between users and initiates decreased. Positive function scores among initiates underwent the most marked change, from a closer resemblance to nonusers in the Autumn, to similarity with users in the Spring. Examination of scores indicated significant changes among initiates in five of the eight variables; expectations of social love, positive and negative functions, attitudinal tolerance of use, and social support for use. Significant and insignificant directional differences between initiates and users remain, however, with users increasing in the established direction on the tolerance of use scale. Multivariate analysis yielded an optimal pattern for high proneness to marihuana use, consisting of high scores in expectations for independence, social support, attitudinal tolerance of use, and positive function of use, with a low score on the negative function scale.

CONCLUSIONS

These data provide considerable support for the field-theoretical social learning model of initiation to college drug use. Initiation to drug use is shown to be accompanied by a process of social learning of the personal meanings of use, in that initiates resemble nonusers before the transition, and users afterwards. The shifts in scores cannot be explained simply in terms of freshman college socialization or drug experience; they are, rather, social psychological concomitants of initiation into drug use. The generalized belief in external versus internal control as differentiating users from nonusers was not supported. Furthermore, initiation to cannabis use among college students cannot be accounted for in terms of a response to the expected failure of conventional behavior, since expectations of academic recognition did not differ among the groups, and in fact users indicated higher expectancies about love and affection. Generally, the psychopathologically-oriented interpretation of initiation to marihuana use as a symptom of inevitable disorder has become increasingly obsolete in the literature. While initiation to use is a significant, though common role transition for the contemporary student, it is the subsequent pattern of use that must be examined for possible maladaptive consequences.

Samuels, Donald J., and Samuels, Muriel. Low self-concept as a cause of drug abuse. Journal of Drug Education, 4(4):421-438, Winter 1974.

DRUG	Multi-Drug
SAMPLE SIZE	37
SAMPLE TYPE	Former Drug Users
AGE	Adolescents; Adults (age 12-22)
SEX	23 Male; 14 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Miami, Florida
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	18

PURPOSE

Earlier studies have suggested that a low self-concept, as indicated by parental rejection, academic failure, social alienation, and feelings of frustration and worthlessness, is a primary causal factor in the initiation of drug abuse among adolescents. Researchers tested this hypothesis among youthful drug abusers in the Miami area.

METHODOLOGY

Subjects consisted of 14 females and 23 males, ages 12-22, former users of marihuana, THC, LSD, amphetamines, cocaine, heroin, hashish, qualudes, mescaline, barbiturates and morphine, who had been members of a drug rehabilitation program for lengths of time ranging from three days to 18 months. Subjects completed an 18-item, open-ended, forced choice sentence completion questionnaire, which also included four open-ended blanks, labeled "other reasons." This instrument was devised as an attempt to measure why they began taking drugs. The forced choice items were categorized as indicating Curiosity, Boredom, Peer Pressure, Pleasure Seeking, and Low Self-Concept, the latter being subdivided into Social Self, Home Self, School Self, and Inner Self. Comments under the item "other reasons" were also classified under the above cateogries.

RESULTS

Curiosity and Boredom were selected as causes of drug abuse 73.6% of the time by 91.9% of the subjects. Peer Pressure was a causative factor 22.4% of the time; Pleasure Seeking, 43.4%; and Low Self-Concept 24.8% of the time. Dividing Low Self Concept into the four subcategories showed the following results: Social Self, 29.2%; Home Self, 19.4%; School Self, 24.3%; and Inner Self, 26.5%. Peer Pressure was chosen by 67.5% of the subjects, Pleasure Seeking by 64.8%, and Low Self-Concept by 75.7%, with the Inner Self accounting for 70.3% of the latter category.

CONCLUSIONS

While low self-concept was not a common denominator as a causative factor of drug abuse in all cases studied, it occurred frequently enough to be considered meaningful. The results indicate that curiosity and boredom were the chief causes of drug abuse among the subjects studied. These facts should be born in mind by educators devising alternatives to drug abuse.

Sanborn, Donald E.; Case, Thomas M.; and Niswander, G. Donald. Drug abusers, suicide attempters, and the MMPI. Diseases of the Nervous System, 32:183-187, March 1971.

DRUG	Hallucinogens, Stimulants
SAMPLE SIZE	12 Drug Abusers; 12 Suicide Attempters
SAMPLE TYPE	Treatment (inpatient)
AGE	Adult (18-25)
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Concord, New Hampshire
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	25

PURPOSE

For a pilot study, scores on the Minnesota Multiphasic Personality Inventory (MMPI) were compared for a group of male suicide attempters and a group of male drug abusers. The study sought to determine whether there was any relationship among the personality characteristics between the two groups.

METHODOLOGY

A sample of 24 males, 12 drug abusers and 12 suicide attempters was drawn from consecutive admission to the New Hampshire Hospital and administered the MMPI within two weeks of their admission. The criteria for inclusion in the study were: males, between the ages of 18 and 25, either a drug abuser with no history of suicidal attempts, or a suicide attempter with no history of drug abuse. Only drug abusers of hallucinogenic drugs (LSD, DMT) and/or stimulants were used in this study. No narcotic addicts or alcoholics were included. All suicide attempters were those who had resorted to self-destructive behavior immediately preceding admission to the hospital. Suicide threats were not included.

The diagnostic categories for both groups were as follows:

- Adjustment Reaction of Adolescence
- Drug Dependence, Hallucinogens
- Personality Disorder
- Psychotic Depressive Reaction
- Schizophrenia (all types)
- Undiagnosed

RESULTS

Schizophrenia dominated the diagnostic categories; 10 out of the total sample of 24 were classified schizophrenic. The mean scores of both groups were remarkably similar in appearance. A t-test showed no significant difference. Mean group scores correlated significantly at the .05 level. The highest mean score for both groups occurred on the Pd scale; the lowest on the Hs and Si scales. The only noticeable divergences between the two groups' scores occurred on the Mania (Ma) and Paranoia (Pa) scales where the drug abuse group exhibited more pathology. On every scale but two, D (depression) and Si (social introversion), the drug abuse group exhibited the same or more pathology than the suicide attempters.

CONCLUSIONS

The drug abusers in this study were very similar in their MMPI scores to scores reported in the literature on narcotics addicts. The high score (68) for drug abusers on the Pa scale confirmed the findings of other studies. Paranoid thinking has been associated with prolonged amphetamine use in other controlled studies. The drug abuser's group score of 68 on the Ma scale may reflect their action-oriented tendencies.

The high scores for both groups on the Pd scale may be due to youthful impulsivity and lack of concern for long-term consequences. For the drug abusers, however, the Pd elevation may have occurred because that scale is based on norms of society in general. Clinical observations indicate that amphetamine and stimulant users are loyal and caring for one another but as a group they do not conform to societal norms.

The norms for the Pd scale may be in need of revision in light of the large sociocultural evolution of which drug abusers form a segment. Drug users tend to score as sociopaths on the scale (based on self-reports) while their behavior may be less sociopathic (e.g., manipulative) than an individual who is occupied in the business world.

The reason for the drug abusers' high score of 69 on the Sc scale may be due to the fact that all subjects were drawn from a psychiatric hospital. The high score could also be accounted for by Keeler's findings that the desire for hallucinogenic experiences correlates significantly with the incidence of schizophrenia.

Scherer, Shawn E.; Ettinger, Ronald F.; and Mudrick, Nathan J. Need for social approval and drug use. Journal of Consulting and Clinical Psychology, 38(1):118-121, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	66
SAMPLE TYPE	Volunteer; Students
AGE	Adults (mean age 21)
SEX	38 Male; 28 Female
ETHNICITY	White
GEOGRAPHICAL AREA	Ontario, Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Marlowe-Crowne Social Desirability Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	16

PURPOSE

Recent studies have indicated that significant personality differences exist between drug users and nonusers, although specific findings vary. Drug users have been found by some researchers to be more passive and dependent, more introverted and dissatisfied with the self, and more radical. Other studies indicate that drug users display behavior, attitudes and self-images indicative of opposition to the traditional social order. Investigators at York University in Ontario, Canada tested the hypothesis that drug users are less prone to give socially desirable responses, and have greater approval needs than do nonusers, with the type of drugs employed serving as key indicators of differences in social desirability along a drug use continuum.

METHODOLOGY

The sample consisted of 38 male and 28 female Caucasian undergraduates, between the ages of 18 and 26, with a mean age of 21. Subjects completed a drug data questionnaire to distinguish between nonusers, soft drug users employing marihuana and/or hashish, and hard drug users who had taken LSD, barbiturates, amphetamines, dimethyltriptamine, tranquilizers, STP, or solvents in addition to marihuana and/or hashish. Participants also took the Marlowe-Crowne Social Desirability Scale, an instrument developed for measuring social desirability independent of psychopathology, and used subsequently as a measure of social approval. Subjects anonymously indicated their age, sex, frequency of drug use and type, and initiation to drug use. A one-way analysis of variance was computed using M-C SDS scores as the dependent variable.

RESULTS

The 15 hard drug users scored highest on the M-C SDS scale, with a mean score of 15.73, indicating the highest need for social approval as between groups. The 24 nonusers, with a mean score of 13.33, indicated higher approval needs than did the 27 soft drug users, who had a mean score of

9.93. Among the hard drug users, 86% were initiated into drug taking through friends, which was true of only 42% of the soft drug users.

CONCLUSIONS

Use of a classification system distinguishing between hard and soft drug use appears salient. Drug use has become widespread on campuses, two-thirds of the sample reporting some drug experience. Persons with lower approval needs may make use of marihuana, a common drug on campus, for reasons other than as a strategy for gaining peer approval, whereas hard drug users may select this means of impressing friends, or securing inclusion in a particular social group. Hard drug users may lack realistic orientations in problem-solving, one manifestation of which is an abnormal desire for social approval. Alternatively, hard drug use may provide relief from feelings of social inadequacy. The investigators mention the therapeutic possibilities of approval motivation, citing Synanon as an example. Approval motivation appears to play a significant role in both the initiation and treatment of illicit drug use.

Schoolar, Joseph C.; White, Elna H.; and Cohen, Charles P. Drug abusers and their clinic-patient counterparts: A comparison of personality dimensions. Journal of Consulting and Clinical Psychology, 39:9-15, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	80
SAMPLE TYPE	Treatment (outpatient)
AGE	14-33 years
SEX	53 Male; 27 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Houston, Texas
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	MMPI; Leary Interpersonal Check List
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	8

PURPOSE

Investigators at the Texas Research Institute's Drug Abuse Clinic studied chronic, multidrug abusers in terms of their interpersonal patterns to elicit data on types of social response, self-description, character structure, and perceptions of parents and ideal self, with an ultimate aim of formulating better techniques of therapeutic intervention.

METHODOLOGY

The drug abuse population consisted of 53 males and 27 females seeking help at the Drug Abuse Clinic. Subjects ranged in age from 14 to 33. All were chronic multiple abusers of a variety of drugs including marihuana, amphetamines, hallucinogens, and narcotics. Upon admission, 41% of the males and 8% of the females were diagnosed as schizophrenic, 24% of the males and 13% of the females as sociopathic, 38% of the females as depressive, and the remainder of both sexes as passive-aggressive or having adolescent adjustment reactions, or other character disorders. The sample was drawn from a wide range of socioeconomic groups. Subjects were matched individually by age and sex with controls from the University of Houston Counseling Service, the outpatient clinic at the Texas Research Institute, and the Child Guidance Center in Houston, and included a wide range of diagnostic categories. Both groups took the MMPI and the Leary Interpersonal Check List, an instrument scoring sets of interpersonal variables on a circular grid with octants, indicating types of responses and intensity. These octants are: managerial-autocratic, competitive-narcissistic, critical-sadistic, skeptical-distrustful, self effacing-masochistic, docile-dependent, cooperative-overconventional, and responsible-overgenerous.

RESULTS

Tests indicated that subjects and controls differed significantly from chance expectancy. Of the drug abusers, 33% fell into octant 3, indicating self-seeking, antagonistic

and argumentative behavior. About 20% of the drug abuse group, but 40% of the controls, fell into octant 5 representing self-effacing behavior. Both subjects and controls scored high in self-deception, with controls being more willing to seek help. Only 42% of the controls, but 70% of the drug abusers, consciously valued socially-undesirable behavior, and 39% of the controls, but only 10% of the drug abusers had basic orientations which could be described as socially desirable. Octant 7 scores indicating cooperative conventional behavior were present in 14% of the controls, but absent in the drug group. Both groups saw fathers as strong and responsible, but 60% of the drug abusers saw mothers as dominant and independent, and lacking in nurturing behavior.

CONCLUSIONS

Compared to a matched population of nondrug using outpatients, the drug abusers in this study emerged as more likely to be defiant and critical, alienating others and resisting cooperation with therapy even while seeking it. The drug abuse population appears to reject as a value any striving, responsible, or cooperative behavior and would rather be passive, critical, and generally oppositional. Drug users apparently reflect a lack of intimacy and warmth in the parental home, and may be seeking in the drug culture the closeness and sharing which was lacking in their own earlier experience.

Segal, Bernard. Personality factors related to drug and alcohol use. In: Lettieri, Dan J., ed. Predicting Adolescent Drug Abuse: A Review of Issues, Methods and Correlates. NIDA Research Issues Series, vol 11. Washington, D.C.: Government Printing Office, December 1975. pp. 165-191. [Stock No. 1724-00496]

DRUG	Multi-Drug
SAMPLE SIZE	579
SAMPLE TYPE	Students
AGE	Adults
SEX	263 Male; 316 Female
ETHNICITY	Predominantly White
GEOGRAPHICAL AREA	New Haven, Connecticut; Murray, Kentucky
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires: Imaginal Process Inventory; Rotter's I-E Scale, Personality Research Form, Zuckerman's Sensation Seeking Scale.
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	13

PURPOSE

Investigators studied patterns of inner experiences, represented by daydreaming and imagery processes, as related to drug use and general personality characteristics. A set of series of systematic discrimination studies using a wide range of personality and imaginal process variables was used to distinguish between drug users and nonusers.

METHODOLOGY

Subjects consisted of 117 males and 68 females enrolled at Yale University, and 146 male and 248 female students at Murray State University. Subjects took a battery of tests, including the Imaginal Process Inventory consisting of 344 items comprising 28 subscales ranking types of daydreams and imaginative traits. They also took the Personality Research Form, Rotter's Locus of Control, Zuckerman's Sensation Seeking Scale, and the Alcohol-Drug Research Survey. Iterative factor analyses were conducted, using a varimax rotation procedure. Other analyses of variables were performed using the Mahalanobis discriminant analysis technique derived from a biomedical computer program, to assess predictability of drug use on the basis of the data.

RESULTS

Factor analysis yielded five significant factors in the combined samples: 1) hard drug use, 2) guilt/dysphoric daydreaming, 3) marihuana use and sensation seeking, 4) positive/vivid daydreaming, and 5) anxious/distractible daydreaming/neurasthenia. Strong positive correlations between factor 1 and use of hallucinogens, barbiturates, methamphetamines, and amphetamines, and a strong negative correlation with use of marihuana appeared in the sample. Factor 3, marihuana use, correlated with general sensation and excitement seeking, and was unassociated with multiple drug use. The Yale sample yielded a sixth factor, which had a relative heavy loading for women, psychological femininity, comprised of traditional feminine traits such as lack of autonomy, need for nurturance,

play, and recognition, and lower thrill-seeking. A separate factor analysis for the Murray State sample showed even more striking sexual differences. For both males and females the best predictive factor was the experience seeking scale of the SSS; for females this was followed by disinhibition, and the PRF subscales, infrequency, impulsivity, achievement, and autonomy; for males, the next best predictors were boredom and present-oriented daydreams, followed by disinhibition, heroic daydreaming, night dreaming, and distractibility daydreaming.

CONCLUSIONS

Marihuana and alcohol apparently are not generally abused by the subject population, and use of heavier drugs, or extensive marihuana use, seems limited to a small minority allied with the counterculture. Drinking and moderate drug use appear normative patterns for late adolescents entering college, and appear not to be linked with any particular pattern of daydreaming or search for a complex inner experience. The experience seeking scale of the Zuckerman SSS and the SSS disinhibition scale may be used with accuracy to predict membership in nonuser, alcohol only, marihuana only, and drug using groups. Further research is in progress to study the personality characteristics associated with sensation seeking behavioral patterns.

Segal, Bernard; Rhenberg, George; and Sterling, Sara. Self-concept and drug and alcohol use in female college students. Journal of Alcohol and Drug Education, 20(3):17-22, Spring 1975.

DRUG	Multi-Drug
SAMPLE SIZE	200
SAMPLE TYPE	Students
AGE	Adolescents; Adults (ages 16-39)
SEX	Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Murray State University, Kentucky
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Tennessee Self-Concept Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	3

PURPOSE

The investigation was designed to determine whether different patterns of self-concepts were evident among females grouped as drug users, alcohol only users, and nonusers of either; and to determine how distinctive the three groups were with respect to self-concept variables. It was hypothesized there would be significant differences among the groups, with the drug group showing the most fluctuation or variation in self-concept.

METHODOLOGY

Subjects consisted of 200 female undergraduate and graduate students at Murray State University in Kentucky. Age ranged from 16 years to 39 years. All subjects were administered a Drug/Alcohol Use Survey and the Tennessee Self-Concept Scale. The TSCS consists of 100 self-descriptive statements which are responded to on a 5-point scale ranging from "completely true" to "completely false." The TSCS provides an overall self-concept score as well as subscale scores on different aspects of one's self-concept: self-identity, self-satisfaction, behavior, physical self, moral-ethical self, personal self, family self, social self, and positive self (a summation of all the subscales). The TSCS also provides six scales, empirically derived from the 100 items, which differentiate among groups often encountered in clinical settings: Defensive Positive (DP), General Maladjustment (GM), Psychosis (PSY), Personality Disorder (PD), Neurosis (N), and Personality Integration (PI).

Discriminatory analysis of the data was accomplished through Rao's generalization of the Mahalanobis Distance Function Technique (D^2).

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RESULTS

Statistically significant group separation was obtained. The three groups were found to differ with respect to patterns of self-concept, with the drug use group varying most with respect to the TSCS scores and reflecting the poorest self-concept. Generally, the drug use group was categorized as most defensive, lacking in self-esteem and self-confidence, and being dissatisfied with their physical, moral-ethical personal and family selves. However, they tended to report a high degree of self-satisfaction and were not uncomfortable socially.

In contrast, the nonuse group was the least defensive and reported a generally positive self-concept. The profile for the alcohol only group was summed up as generally positive, as emotionally stable, and as apparently being in between the drug and nonuse groups.

CONCLUSIONS

The ability to discriminate between drug users and nonusers is consistent with other study findings. This suggests that important and significant personality characteristics exist with respect to drug users and nonusers of drugs and alcohol, and that more needs to be known about these differences. In addition, the findings suggest that although alcohol only users may differ from nonusers and drug users on the TSCS, predictability for alcohol use is problematical. One reason for this difficulty in identifying alcohol only users is that alcohol is socially acceptable and generally available. Alcohol may, more or less, be the norm for college females in this sample, and nonuse or drug use is the exception. Thus, identification of nonusers and drug users may be obtained more readily because they differ significantly with respect to personality variables. The alcohol users appear to have attributes common to both groups.

This study represented one phase of a long-range investigation of the role of personality variables in the use or nonuse of drugs and alcohol. Further studies were to be made with females from different locations and with males.

Shean, Glenn D., and Fechtmann, Freddie. Purpose in life scores of student marihuana users. Journal of Clinical Psychology, 27:112-113, 1971.

DRUG	Cannabis
SAMPLE SIZE	27 Subjects; 28 Controls
SAMPLE TYPE	Students
AGE	Adults
SEX	Subjects: 20 Male; 7 Female Controls: Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Purpose in Life Test
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	4

PURPOSE

Studies of the acute effects of marihuana indicate relatively mild physiological and psychological effects, particularly upon experienced users. Nevertheless, a great deal of concern has been expressed over the possible long-term effects of marihuana use.

A self-report device was used to determine students' perception of the effects of regular marihuana use and the Purpose-in-Life test was administered to determine the degree to which they had found meaningful goals around which to integrate their lives.

METHODOLOGY

Subjects were 27 undergraduate students (20 males, seven females) who reported having smoked marihuana at least once a week for the previous six months. All were in good academic standing at a small liberal arts college that draws most of its enrollment from upper middle class families.

Students anonymously completed a questionnaire administered by an undergraduate assistant who was an accepted member of the drug subculture. The questionnaire included several initial questions about the frequency of use of the following drugs: marihuana, alcohol, amphetamines, LSD, DMT, STP, and other "strong" hallucinogens and opiates. Each was asked to describe in as much detail as possible the positive and negative changes in his life and personality which have occurred as a result of regular marihuana use. The following two questions were answered by circling yes or no: (1) Do you consider the positive effects of your marihuana use to outweigh the negative? (The order of positive-negative was alternated.) (2) Do you currently feel psychologically dependent on marihuana? The Purpose-in-Life Test was administered during the same interval to drug users and to a group of 28 nondrug control subjects enrolled at the same college.

Subjects reporting greater than occasional use of LSD and other hallucinogenic drugs (10 subjects) were dropped from the sample to avoid a possible confounding with the effects of marihuana.

Responses to the essay questions were grouped by the experimenter into several general categories. Each complete thought or sentence was then sorted into one of the categories. Following this procedure, two graduate assistants independently sorted separate statements into these categories. Interrater reliability was .82; statements were included in the category if two of the three raters agreed.

RESULTS

Reported positive effects were categorized as follows: (a) enhanced interpersonal sensitivity and awareness--15; (b) increased personal happiness and satisfaction with life--12; (c) helped outgrow middle class values--9; (d) enhanced personal growth--8; (e) enhanced appreciation of sensory experience--6; (f) made more relaxed--3; (g) increased sociability--3; (h) escape from boredom of academic routine--3; (i) transcendence--2; (j) helps overcome depressions--2. Negative effects were reported as (a) depressions following use--10; (b) paranoid ideas--8; (c) loss of academic ambitions--4; (d) guilt feelings--2.

Replies to the final questions were as follows: (1) overall effects of marihuana, positive--24, negative--3; (2) psychologically dependent on marihuana, yes--2, no--25.

Mean Purpose-in-Life score for the control subjects was 98.39, while regular marihuana users had a mean of 88.47 ($M = 4.57$). These scores may be compared to those of 805 normals ($M = 112.42$) and 346 psychiatric patients ($M = 92.60$) reported by Crumbaugh.

CONCLUSIONS

Results indicated that drug users scored significantly lower on Purpose-in-Life. Although reported long-term effects of marihuana varied, there was a tendency for the effects reported to be those associated with a more passive and experiential life style.

Shetterly, Henry Titus. "Self and Social Perceptions and Personal Characteristics of a Group of Suburban High School Marijuana Users." Ph.D. Dissertation, University of Denver, 1970. Ann Arbor, Michigan: University Microfilms, No. 71-2452, 152 pp.

PURPOSE

The self and social perceptions and the personal characteristics of a group of socially privileged suburban high school marihuana users were explored. Specifically, the study was designed to: (1) identify the subjects' feelings and attitudes toward family, school, religion, peer group and social issues; (2) identify the personal characteristics of the subject population, i.e., interests, conduct, health, school aptitude, achievement, attendance; (3) differentiate those personality factors in which the subject population differ significantly from a normed group of high school students; and (4) compare findings from the present study with those available on other drug using populations involving a similar age group.

METHODOLOGY

Forty white male adolescents, ages 14 through 18, participated in the study on a voluntary basis. Fourteen were court referrals because of their drug involvement. All were enrolled in the Montgomery County (Maryland) Public Schools at the time of interview. Four sources were utilized to gather information: (1) a taped interview, (2) The Mooney Problem Check List, (3) The High School Personality Questionnaire (HSPQ) and (4) school records for each individual.

RESULTS

In general, the subjects studied were reared in a permissive atmosphere wherein discipline is loose and inconsistent, and a communication breakdown between the subjects and their parents was a dominant theme in the self reports. This rift appears to be heightened by criticism leveled at the respondents by their parents and frequent opinion clashes between parent and child. Their parents, though, are supportive of them in a moral as well as material way.

Those studied possessed more scholastic aptitude than do most high school students, but the majority were functioning below expectancy levels in terms of earned grades. They were, in general, disenchanted with school, especially from the standpoint of course work; they did not, as a rule, participate in school activities. Their disenchantment, however, was not manifested by overt, hostile school behavior. Inherent in the life style of the subject was an aversion to games and physical exercise.

The data supported previous research on youthful marihuana use in that the subjects tended to: (1) reject formalized religion, (2) feel that marihuana is less harmful than alcohol, (3) follow a nondelinquent pattern of behavior, (4) be a heterogeneous group in terms of patterns of drug use, (5) first experiment with marihuana because they were "curious," (6) have their initial marihuana experience between the ages of twelve and fifteen, (7) be inducted into use by a peer member, and (8) use marihuana in a social group situation.

Regardless of the pattern of drug use followed, excessive, moderate, or infrequent, the orientation of the subjects toward society was of a conventional nature, and all had some established ties with the conventional world.

CONCLUSIONS

In evaluating the results, caution is urged in making generalizations since no claim was made that the sample was statistically representative of high school students who use marihuana.

Smart, Reginald G., and Fejer, Dianne. Illicit LSD users: Their social backgrounds, drug use and psychopathology. Journal of Health and Social Behavior, 10:297-308, 1969.

DRUG	Hallucinogens
SAMPLE SIZE	100
SAMPLE TYPE	Volunteer; General Population
AGE	Adolescents; Adults (15-37)
SEX	81 Male; 19 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Toronto, Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Otis Quick-Scoring Mental Ability Test; Thematic Apperception Test; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	19

PURPOSE

Researchers studied social and personality characteristics of LSD users to determine personality profiles, the nature and extent of LSD and other drug use, reactions to psychoactive drugs, and motivation for initial and continuous usage.

METHODOLOGY

The sample group consisted of 100 users of LSD and other hallucinogens, obtained by personal contacts. Ranging in age from 15 to 37, the sample population was extended to include as broad a social and age spectrum as possible, and contained high school and college students, and full or part-time employed individuals of both sexes. Forty-six nonuser controls were obtained from job placement agencies. Subjects took the Otis Quick-Scoring Mental Ability Test, the Thematic Apperception Test, and the MMPI. They also participated in a structured interview eliciting information about social and demographic characteristics, the frequency, effect, and supply source of drugs used, as well as previous contacts with mental health personnel. Data from these investigations were correlated to obtain general personal profiles and descriptions of LSD users as contrasted with controls.

RESULTS

The LSD users were 81% male, and 87% single, with half the marriages of the remaining 13% ending in divorce or separation, usually with children. The majority were Canadian, more than half were Protestant in origin, with Jewish users representing 18% of the sample; however, only 12% practiced a religion, primarily Zen Buddhism, which was not their traditional family religion. LSD users had significantly less education than nonusers, although their fathers did not differ in educational level from matched nonusers. Most of the controls, but only 30% of the users

were students, while 38% were unemployed or worked part-time. Twice as many nonusers drank alcohol frequently. Most users had also taken tranquilizers, barbiturates, anti-depressants, and stimulants, usually obtained from friends. Nonusers who had taken drugs other than hallucinogens generally did so by prescription, and for medicinal purposes, while LSD users employed other drugs for a "high" or some other nonmedical effect. Users reported euphoria as an effect of marihuana, as well as psychedelic perceptions and increased sensitivity. Most users had taken LSD less than ten times, although frequency ranged from once to 400 times. Reported effects ranged from perceptual changes to beneficial insight and problem-solving, or religious awareness, although 63% reported some adverse reactions, particularly panic or paranoia. Subjects began use out of curiosity 56% of the time, rather than because of peer influence (17% of the time); most received their initial LSD from friends, and the remainder from other illicit sources. Although the users and controls did not differ in intelligence, 96% of the users had MMPI profiles judged abnormal. Of these, 24% indicated a conduct disorder and 5% a psychotic pattern. By contrast, only 46% of the nonusers had abnormal profiles, but of these 11% were deemed psychotic. Eleven percent of the LSD users displayed a profile not yet classified, with hypomania, schizophrenia, and psychopathic deviate peaks. TAT themes of severe and punishing parents were common to both users and controls, and slightly more frequent for users. Finally, 51% of the users, but only 17% of the controls, had undergone mental health treatment or consultation.

CONCLUSIONS

Only tentative suggestions can be drawn from the data about social class and drug use, although findings indicate that users are underachievers. Multi-drug habituation in this group appears common in order to achieve mood or perceptual modification, with the exception of alcohol. General change of any sort appears more sought after than specific effects. The MMPI profiles, with their high incidence of abnormality, and the frequency of psychiatric histories, indicate general emotional disturbance, with intensity of abnormality being unrelated to frequency of LSD use. The conclusion is that users of all types of drugs are more disturbed than nonusers, and this disturbance predates drug use. Conceivably the use of hallucinogens is mainly a response of middle class young people to emotional disturbance. The conduct disorder configurations in the MMPI profiles of LSD users also suggest a tendency toward social nonconformity and rejection of traditional values and restrictions, for which drug taking may be the chosen pattern of expression, rather than, for example, alcohol, which is socially acceptable for adults.

Smart, Reginald G., and Jones, Dianne. Illicit LSD users: Their personality characteristics and psychopathology. Journal of Abnormal Psychology, 75(3):286-292, 1970.

DRUG	LSD
SAMPLE SIZE	146
SAMPLE TYPE	Volunteer
AGE	Adolescents; Adults (Range: 15-37, Mean Age 20)
SEX	Both Male (above 80%) and Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; MMPI
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	14

PURPOSE

Investigators at the Alcoholism and Drug Addiction Research Foundation of Ontario, Canada, studied the personality characteristics and frequency and type of psychopathology for a sample of illicit LSD users as compared with matched nonuser controls.

METHODOLOGY

One hundred subjects who had used LSD were obtained through contact with informants. They ranged in age from 15 to 37 with a mean age of between 20 and 21, and a modal age of 19. Use of LSD varied between one occasion and more than 100 times. The 46 nonuser controls were matched in age, sex, marital status, place of birth, religion, education, parental occupation, and IQ. The Minnesota Multiphasic Personality Inventory was administered to both groups. Subjects also participated in a structured interview containing questions on demographic and social characteristics, drug use, and previous consultation with mental health agencies. The MMPI profiles were analyzed for indications of psychosis, psychoneurosis, and conduct disorder, and responses were scored for eight special scales including escapism, ego-strength, familial discord, authority problems, social alienation, self-alienation, psychotic tendencies, and underachievement, as well as hypomania, psychopathic deviation, and schizophrenia. Users were compared with controls, and with each other in terms of frequency of use.

RESULTS

LSD users had significantly less education than nonusers, 54% of them having completed high school as compared to 73.9% of the nonusers. All but three of the nonusers were students, while 30% of the users were students, the remainder being unemployed or working part-time. Most subjects drank alcoholic beverages, rarely excessively, with twice as many nonusers drinking up to three

times a week. About 85% of the users, but only 39% of the nonusers had taken psychoactive drugs other than LSD, and all of the LSD users, but only 28.3% of the nonusers had tried marihuana. Most users had taken LSD fewer than 100 times, while 11% had tried it only once; and 63% reported adverse reactions. Users scored significantly higher than nonusers on scales measuring schizophrenia, hypomania, psychopathic deviation, masculinity-femininity (for males only) and hypochondriasis as well as higher scores on all scales except social interest. The most frequent two-digit code groupings for both groups were high 98's or 89's, a pattern usually restricted to the psychiatric population. The 94 or 49 grouping occurred in 17% of the users' profiles, and 6.5% of the nonusers' profiles. Similarly, 9% of the users, but only 2.2% of the nonusers, displayed high 84's or 48's. All these code groupings are generally indicative of psychopathology. In general, 96% of the users' profiles were adjudged abnormal, as compared with 46% of the nonusers; 23% of the users indicated a conduct disorder, and 13% displayed a psychotic pattern; 2% of the nonusers were categorized as having conduct disorder patterns, and 11% were judged psychotic. No significant differences were found among groups of users except that those having taken LSD only once had the highest escapism scores, and subjects who had taken the drug over 31 times had the lowest.

Only 17% of the nonusers, but 51% of the users had undergone psychiatric treatment or consultation. Nonusers ordinarily sought treatment for difficulty with school work, while users were seen for anxiety, depression, hallucinations, paranoia, suicidal tendencies, homosexuality, and family problems, but seldom because of their LSD experiences.

CONCLUSIONS

Findings indicate a high incidence of psychosis and psychopathology among users of LSD, particularly conduct disorder characterized by an elevated psychopathic deviation score, with the least frequent users showing no less disturbance than the chronic user. Much of this psychopathology preceded any drug use. The conduct disorder pattern may also be explained as suggesting social nonconformity and a rejection of traditional values and restriction, of which drug use is an expression. The nonclinical scales of the MMPI indicate alienation and emotional difficulty, problems with family and authority figures, and insufficient ego strength to deal with these difficulties, which may be of long duration.

Steffenhagen, R.A.; Schmidt, F.E.; and McAree, C.P. Emotional stability and student drug use. Journal of Drug Education, 1(4):347-35?, December 1971.

DRUG	Cannabis; Multi-Drug
SAMPLE SIZE	338
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	200 Male; 138 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Vermont
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; MMPI; Self Report
DATE(S) CONDUCTED	1968 - 1969
NO. OF REFERENCES	8

PURPOSE

In an attempt to establish a relationship between emotional stability, dropping out of college, and drug use, investigators at the University of Vermont compared academic, psychiatric, and drug use patterns among undergraduates.

METHODOLOGY

The population for this study consisted of 200 male and 138 female undergraduate volunteers, and included 100 male and 38 female self-acknowledged drug users. All participants completed the Minnesota Multiphasic Personality Inventory (in which a score above 70 on any scale indicates deviance) and a sociodemographic questionnaire, as well as a self-report on their drug use, if any. The participants were characterized as nonusers, users of marihuana only, multiple drug users, and gross-multiple drug users. Collected data were organized by sex, academic year, and MMPI scale scores. Information concerning dropout statistics was obtained from University records.

RESULTS

For both sexes, 45.1% of the nonusers scored above 70 on at least one MMPI scale, while 80.4% of the users had scale values of this magnitude. The comparison of marihuana-only users and controls indicated that there was little difference between these two groups, but considerable difference between them and the multiple or gross-multiple users. No clear relationship was observed between academic year and intensity of drug use. However, use of marihuana appeared to decline over the four-year undergraduate period, while multiple drug use remained constant.

Users of any drug were also compared with nonusers in terms of severity of psychiatric problems as suggested by a scale of 80 or above on the MMPI. The data indicated that 8% and 9% of the

male and female nonusers respectively, but 32% and 29% of the drug users, had severe emotional disturbance. Drug users had three times the incidence of nonusers.

CONCLUSIONS

As the marihuana user and nonuser cannot be differentiated, it is evident that it is the pattern of drug use which is related to emotional instability and not drug use *per se*. Emotional instability, as measured by the MMPI, is directly correlated with drug use; student drug abuse may be considered a form of psychological dropping out, analagous to actual withdrawal from college. The more emotionally disturbed students resort to drug use as a way of handling their psychic problems and untenable situations. The drug user appears to be a sensitive, creative, probing individual with problems in interpersonal relations, and is possibly a schizoid personality with need for esoteric pursuits to achieve the lacking sense of identity. It is evident that the youth drug culture is caught in an identity crisis; many college students use drugs, resolve their identity crisis, and abandon drugs by the time they graduate. Emotional instability may be enhanced or even created by the unique environment of the university. Drugs are not and should not be the focus of attention on a campus, and a university can only deal with the drug use phenomenon by accepting responsibility for the emotional climate of the campus and by providing services that will help the student cope with his own emotional problems.

Stokes, Joseph Powell. Personality traits and attitudes and their relationship to student drug using behavior. The International Journal of the Addictions, 9(2):267-287, 1974.

DRUG	Multi-Drug
SAMPLE SIZE	783
SAMPLE TYPE	Students
AGE	Adults
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Chicago, Illinois
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	12

PURPOSE

Existing personality inventories are possibly inadequate for investigating personality traits and attitudes that predict drug use, because such traits may cross-cut or combine several traditional categories. This study attempts to define personality constructs particularly relevant to drug use, and to develop and validate an instrument to measure these factors.

METHODOLOGY

The investigation made use of five factors based upon popular concepts of the drug user and common sense explanations, rather than traditional personality theory. These factors included: hedonistic pleasure seeking, dissatisfaction with and a desire to change oneself, general tendency to use drugs whether medical or illicit, fear of personal reaction to drugs, and respect for the illegality of psychedelic drug use. The instrument consisted of 41 statements used to define each of the five factors and requested responses on a seven-point scale ranging from "disagree strongly" to "agree strongly." The sample consisted of 738 undergraduates enrolled in introductory psychology classes at the University of Illinois. The 41 items were subjected to a principal components factor analysis with oblique rotation. As a result of this analysis, the hedonism factor was broken into two separate factors: sensual hedonism, and philosophical hedonism. Chi-square and Spearman's Rank correlations were also employed. As a check for concurrent validity, 229 of the subjects took a self-descriptive inventory, the results of which were correlated with the self-dissatisfaction factor. The illegality factor was validated with a subgroup of 225 subjects asked to rank their reasons for nonuse. Participants were also categorized as principled nonusers of marihuana, nonusers, former users, lone or heavy marihuana users, principled and nonprincipled nonusers of hallucinogens, heavy hallucinogen users, nonusers of alcohol, and heavy users of alcohol.

RESULTS

Factor I, fear of personal reaction to drugs, was strongly and negatively related to use of tobacco, alcohol, marihuana, hallucinogens, and prescriptive amphetamines, barbiturates and tranquilizers; and was weakly or not related to use of mild nonprescription drugs like coffee. Factor II, desire to change the self, was related to drug use, but more weakly than other factors. Factor III, respect for illegality of psychedelic drug use, was strongly and negatively related to marihuana and hallucinogen use, as well as to use of the legal drugs alcohol and tobacco. Alcohol, marihuana, and hallucinogens were related strongly to Factor IV, sensual hedonism, and would appear to be used exclusively for this purpose. These same drugs were also related to Factor V, philosophical hedonism. Factor VI, the predisposition to take drugs in general, was strongly related to use of all drugs, legal, prescription, and illegal, with the exception of coffee and tea. Principled and nonprincipled nonusers of marihuana scored dissimilarly, with the latter resembling heavy users; that is, having: 1) little respect for illegality; 2) high sensual and philosophical hedonism; 3) desire for self-change; and 4) tendency to take drugs. Both nonusers share a high fear of reaction to drugs. Parallel patterns existed between the principled and nonprincipled nonusers, as compared with the users of hallucinogens. Nonusers of alcohol scored significantly lower than other groups in terms of tendency to use drugs, while heavy users scored highest in hedonism and drug-taking tendency.

CONCLUSIONS

Fear of personal reaction to drugs and general tendency to use drugs of all sorts appear the most important factors in predicting drug use. The most important reasons for not using marihuana were general dislike for any kind of chemical agent, and fear that the drug would become a psychological crutch, rather than lack of access or respect for its illegality. Dissatisfaction with the self, related only weakly to drug use, indicates that the typical student drug user is not turning to drugs out of a sense of despair, or to alter himself, although individuals may do so. It would seem that drug use at all levels is here to stay, and a campaign aimed at eliminating social, nonmedical drug use is foolish and unrealistic. It is the responsibility of the social and behavioral sciences to understand this drug use and differentiate it from drug problems. The investigator cautions that the instrument devised in the present study was used on a large group of anonymous subjects, and may not be useful for predicting drug use when the respondents are identifiable.

Victor, Hope R.; Grossman, Jan Carl; and Eisenmann, Russell. Openness to experience and marijuana use in high school students. Journal of Consulting and Clinical Psychology, 41(1):78-85, 1973.

DRUG	Cannabis; Multi-Drug
SAMPLE SIZE	871
SAMPLE TYPE	Students
AGE	Adolescents (12-18)
SEX	Both Sexes
ETHNICITY	White and Other
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Psychological Tests
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	20

PURPOSE

Recent studies have indicated little psychopathological difference between marihuana users and nonusers, although heavy use seems correlated with experimentation with other drugs. Some evidence indicates that moderate marihuana users tend to be more self-confident, socially poised, open to ways of altering consciousness such as meditation and Yoga, nonauthoritarian, and spontaneous than nonusers. Grossman, Goldstein, and Eisenman (1971) reported characteristics of marihuana users indicative of the creative personality among college students. Investigators at Temple University tested the findings of Grossman et al. in a study of high school students.

METHODOLOGY

Of the original 984 male and female students in grades 8 through 12, enrolled in a predominantly White, middle income neighborhood high school, 871 students enrolled in college preparatory programs were selected for this study. Subjects completed a questionnaire including demographic information, birth order, religion, grade level, scholastic average, and drug use. The latter included frequency of marihuana use, duration since initial experience, and experimentation with hashish, amphetamines, LSD, heroin, opium, or barbiturates. Subjects then took the Personal Opinion Survey, the California F Scale, Pearson's Internal Sensation Novelty Seeking Scale, and the Manifest Anxiety Scale. Five levels of marihuana use were distinguished: among nonusers, those who never expected to try the drug were classified apart from those who anticipated eventual experimentation and were termed Nonusers A and B, respectively; those who had tried marihuana but discontinued it were termed experimental users, as distinct from moderate users smoking the drug up to five times monthly, and heavy users.

RESULTS

Experience with marihuana increased with age, from 4% among eighth graders to 55% among twelfth graders, with increased frequency. In general, females experimented more than did males in grades 9 and 10, possibly as the result of dating behavior which exposes girls to older boys. By grade 12, both sexes used marihuana with equal frequency. In all grade levels, Protestants were lowest in marihuana use, Jews slightly higher than the mean, with Catholics reporting the most experience, possibly a reflection of rebellion against the traditionally strict Catholic upbringing. As frequency of marihuana use increased, so did levels of creativity, adventuresomeness, internal sensation and novelty seeking, and anti-authoritarianism. Nonusers who were open to the idea of future experimentation with marihuana tended to score similar to the moderate users. No difference in manifest anxiety appeared between the groups. Long-time moderate users showed increased desire for internal stimulation. Scholastic average was somewhat lower among users than nonusers, despite the fact that the former showed greater aptitude; there was no relationship between academic performance and length of marihuana use. Users tended to express dissatisfaction with school. Heavy marihuana users, particularly females, were more likely to experiment with other drugs.

CONCLUSIONS

Creativity, as a correlate of marihuana use, appears a relevant variable in college-oriented students. There was no evidence from this study that continued or long-term marihuana use results in reduced personal functioning, nor causes any personality change; rather, the possession of certain traits, notably those associated with creativity, tend to make an individual more open to the experience of marihuana use.

Weckowicz, Thaddeus E., and Janssen, Doug V. Cognitive functions, personality traits, and social values in heavy marijuana smokers and nonsmoker controls. Journal of Abnormal Psychology, 81(3):264-269, 1973.

DRUG	Cannabis
SAMPLE SIZE	22
SAMPLE TYPE	Students
AGE	Adults (average age 22)
SEX	Male
ETHNICITY	White
GEOGRAPHICAL AREA	Alberta, Canada
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Cognitive Functioning Tests; Psychological Tests
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	47

PURPOSE

The ambiguous nature of earlier studies of long-term heavy marihuana smoking indicates the importance of carefully matching the experimental and control samples on important biological, social and educational variables. Previous studies of college students suggest differences, not necessarily psychopathological, in social and interpersonal adjustment between smokers and nonsmokers. This investigation compared the performance of chronic marihuana smokers and nonsmoker controls on selected cognitive and perceptual tests, and also on a few personality, value, social attitude, and judgment scales. The hypothesis was tested that the smokers would show primitivization of cognitive functions, as manifested by field dependence, inadequate control of attention, and low articulation of perceptual field.

METHODOLOGY

Twenty-two male volunteers, students enrolled in education or liberal arts majors, participated in the study. Eleven heavy marihuana smokers composed the drug group. Their average age was 22.2 years, and average amount of education was 13.4 years. All reported smoking marihuana regularly, three to five times per week, for a period of no less than three years, median four years, and some had taken LSD or amphetamines, but no heroin, on a few occasions. The eleven controls averaged 24.0 years of age and 13.2 years of education, with no history of marihuana smoking or nonmedical drug use. Subjects and controls were matched as far as possible for age, education, cultural backgrounds and socioeconomic level. All participants were White, Protestant, native English speakers of predominately Anglo-Saxon stock, from upper middle class families. All were gainfully employed, and none had a history of psychiatric illness. Participants were paid $20 for cooperating in the experiment. The drug group subjects had long hair and wore "hippie" style clothing, while the nonuser subjects dressed conventionally. All 22 participants took a battery of 26 tests designed to quantify field dependence, cognitive functioning, moods,

personality traits, social attitudes and values, and aesthetic judgment. Field dependence instruments were the Rod and Frame test, Witkin Embedded Figure Test, Muller-Lyer Illusion, Stroop Test, and Head-size Judgment test. Cognitive measures employed the Guilford Number Facility, Induction, and Speed of Closure; Bennet's Space Relation; Sherman's Letter Finding; and Luchins Jars. Instruments used to measure personality included the Clyde Mood Scale, Guilford-Zimmerman Temperament Survey, California Psychological Inventory, California F Scale, Rokeach's Dogmatism Scale and Value Survey, Morris' Ways to Live Test, Gordon's Survey of Interpersonal Values, the Allport-Vernon-Lindsey Study of Values Test, the Traditional Family Ideology Scale, Eysenck Inventory of Social Attitudes--Radicalism, and the Rapaport Association Test. The Graves Design Judgment, Meier Art Judgment, and Welsh Figure Preference tests measured aesthetic judgment. Chi-square, F, t and two-tailed t tests were performed on the data.

RESULTS

In the various field-dependence tests, the basic hypothesis of the study was not supported. In the cognitive tests, the drug group scored higher on eight out of the eleven tests. Drug users scored lower on the Guilford Number Facility, however, but not significantly lower. The drug group ranked higher than the nondrug group on the Wisdom and Happiness Values scales, while the nondrug group scored higher on the Sense of Accomplishment, Logical Thinking, and Responsibility Value scales.

CONCLUSIONS

It was hypothesized that marihuana users would display greater field dependence, characterized by an inability to function independently; absence of initiative; passivity; and primitive undifferentiated body image. However, long term heavy use of marihuana does not appear to have this effect, although the investigators present this finding as tentative. The poorer performance by marihuana smokers on the Guilford Number Facility requires further study in view of the claims that this drug affects sequential information processing. As far as personality and value scales are concerned, the obtained differences suggest that marihuana users tend to conform less to the value of the dominant culture, show certain rebelliousness, and nonconformity to the prevailing mores, and perhaps alienation from the established society. They appear to reject social conventions and traditional family ideologies, but adopt a broad moral perspective, with emphasis upon radical, mystical, and aesthetical aspects of experience. The characteristics of marihuana smokers suggest membership in a deviant subculture, rather than immaturity, emotional maladjustment, or other categories of the mental health-illness continuum. No claim is made by the investigators that marihuana is harmless; rather, future study is indicated.

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Welpton, Douglas F. Psychodynamics of chronic lysergic acid diethylamide use. Journal of Nervous and Mental Disease, 147(4):377-385, 1968.

DRUG	Hallucinogens
SAMPLE SIZE	10
SAMPLE TYPE	Volunteer
AGE	Adults (mean age 24.6)
SEX	Male
ETHNICITY	White
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews; Observations; Laboratory/Examination Psychological tests
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	14

PURPOSE

Despite warnings about the adversity of its effects, LSD continues to be a drug widely used by certain subgroups. The illegality of this drug makes study of its users difficult, with the result that knowledge of the personal lives and psychodynamics of hallucinogen users has been derived primarily from psychiatric patients, usually hospitalized. Investigators at the National Institute of Mental Health studied volunteer chronic LSD users, to establish a psychiatric profile of these individuals, and to explore their motivations for continued use.

METHODOLOGY

All 10 participants were White middle or upper middle class males, ranging in age from 21 to 31, with a mean age of 24.6 years. Subjects varied in their duration of use from 6 months to 5 years, with a mean duration of 2 years; frequency of use varied from 6 to 100, with a mean of 37.5 experiences. Five of the subjects were married, one of these was divorced and remarried while another was legally separated. Five were of Protestant, four of Jewish, and one of Catholic upbringing. Subjects were screened by a diagnostic psychiatric interview, and the Rorschach, Bender Visual-Motor Gestalt, and Human Figure Drawing tests. They were subsequently examined as volunteer inpatients for six days in four subsequent interviews, two of which were conducted following administration of detroamphetamine and LSD. During the hospital stay, all were continuously observed by staff.

All subjects were high school graduates who had attended college from one-half to eight years, with a mean of three years. Three had earned bachelor's degrees and one had obtained a Ph.D. All worked at temporary jobs of a nonchallenging sort, and dabbled in creative or artistic activities. Five subjects had seen psychiatrists or engaged in therapy prior to the study, but none had been diagnosed as psychotic or borderline, and none had sought psychiatric assistance for the effects of LSD.

RESULTS

Subjects indicated failure in intimate relationships in the parental family, with hostility and emotional alienation from the father, dependency upon the mother, and intense sibling rivalry. Typically, subjects either remained close to home or broke with the family, subsequent contacts being characterized by animosity and resentment. Married subjects indicated failure in intimacy with spouses. Each participant indicated problems with sexual identification, avoiding sexuality or showing intense preoccupation with homosexuality and sadomasochism. The Human Figure Drawing test revealed marked alienation and concern over dominance, submission, superiority and inferiority. In the Rorschach test, subjects approached the material as though it were a test of imagination with no reality requirement, and responded with bizarre, fantastic, or idiosyncratic interpretations ordinarily indicative of schizophrenia; however, rather than displaying anxiety, subjects enjoyed their responses. These tests, combined with the clinical observations, led investigators to assess seven of the group as having narcissistic, schizoid, passive dependent or impulsive types of character disturbances, and the remaining three as borderline psychotics. The most consciously articulated motivation for LSD use was the quest for intense sensory and perceptual experiences; less consciously articulated was the search for interpersonal relatedness. Subjects insisted on the value of LSD and denied the transciency or possible adversity of its effects. They expressed intense loyalty to the drug taking subculture and scorn for established society, perceived as insensitive and materialistic.

CONCLUSIONS

The ten subjects, characterized by pathological family and marital histories, and by highly abnormal responses in interviews and on standardized psychological tests, used LSD to relieve their chronic despair and to find some meaning in life. Through the drug they hoped to break through perceptual barriers and be open to all sensations, discover the genuine, and become more aware and creative. Using LSD to temporarily break down self-object barriers, they sought to merge with others in experiences of intimacy unknown or lost in childhood. LSD gained them membership in a highly ethnocentric group which provided some of these personal needs, as well as an ideology justifying their behavior patterns while projecting blame for problems upon society at large.

Zuckerman, Marvin; Bone, Ronald N.; Neary, Richard;Mangelsdorff, D.; and Brustman, Barbara. What is the sensation seeker? Personality trait and experience correlates of the sensation-seeking scales. Journal of Consulting and Clinical Psychology, 39:308-321, 1972.

DRUG	Multi-Drug
SAMPLE SIZE	98
SAMPLE TYPE	Students
AGE	Adults (College age)
SEX	38 Male; 60 Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Sensation Seeking Scale
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	

PURPOSE

A previous study (Zuckerman et al., 1970) compared drug, sex, smoking and alcohol experience of subjects taken from the extreme scorers (upper and lower deciles) of the General Sensation-Seeking Scale (SSS). The high SSS subjects reported more drug, alcohol, smoking, and sexual experience than the lows. The purpose of the present study was to replicate and extend the findings to the entire range of the SSS by using a middle-scoring group in addition to the extremes. The correlations between drug, alcohol, and sex experience scores and the SSS were completed and the pattern of correlations of these scores were compared with the various SSS subscales.

METHODOLOGY

Subjects were 38 males and 60 females from advanced psychology classes in personality and abnormal psychology. They were given the SSS and an experience questionnaire in one session; the questionnaires were taken anonymously. Subjects were told in advance of the nature of the questionnaire and told they had the option of not filling it out; only a few subjects declined.

In the experience questionnaire, 15 classes of drugs were listed; subjects were asked to describe their experience with each class of drugs by checking "never," "once or twice," "several times," "more than several," "less than 10" or "10 or more." Sex experience items included one on masturbation and several on homosexual and heterosexual activities. Three additional items asked subjects to indicate their experiences with cigarette smoking, coffee drinking, and alcohol drinking.

Four subscales of the Sensation-Seeking Scale were used: Thrill and Adventure Seeking, Experience Seeking, Disinhibition, and Boredom Susceptibility.

Chi-squares were done on the individual items of the scales comparing the lower, middle, and upper thirds of the distributions on the General scale and dividing the responses into low and high at the point which yielded the closest approximation to an even division. A one-tailed test was used for significance, since the direction was predicted from theory and prior findings.

RESULTS

As in the prior study, the SSS proved to be related to sexual and drug experience. In all cases, high sensation seekers were expected to have more experience than lows, and the middle group was expected to fall somewhere intermediate; this was indeed the case for all significant items on the sexual scales. In the case of every drug except tranquilizers, the high SSS group of males contained the greatest number of users. The Chi-square differences between low, medium, and high SSS scorers were significant for both sexes on hashish, amphetamines and LSD. Significant differences for males only were found on cocaine, opium, and mescaline. Significant differences for females only were found for marihuana and barbiturates. The total drug score was significantly correlated with the total heterosexual score for both sexes.

The scale most correlated with drug experience was ES (Experience Seeking), as expected. However, the correlations were not much higher than other significant correlations with other scales, and the General scale correlated significantly with drug experience, indicating that drug usage is a manifestation of general sensation seeking.

It is also interesting to note that drug and sex experience were as highly correlated with each other as they were with ES; this suggests that both are aspects of a general sensation-seeking trait. Alcohol drinking was related to drug and sex experience in females only.

CONCLUSIONS

It may be that with increased exposure to the "drug" scene in college, high SSS subjects turn increasingly to drugs, while low SSS subjects turn to alcohol. More work should be done on longitudinal studies of subjects from different ranges of sensation seeking, beginning at the time of their entrance to college.

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